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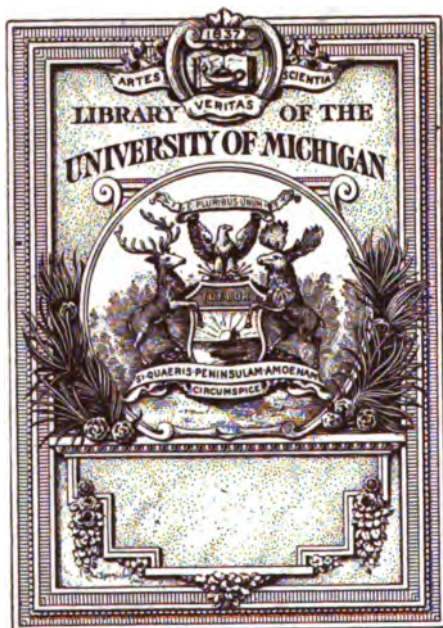
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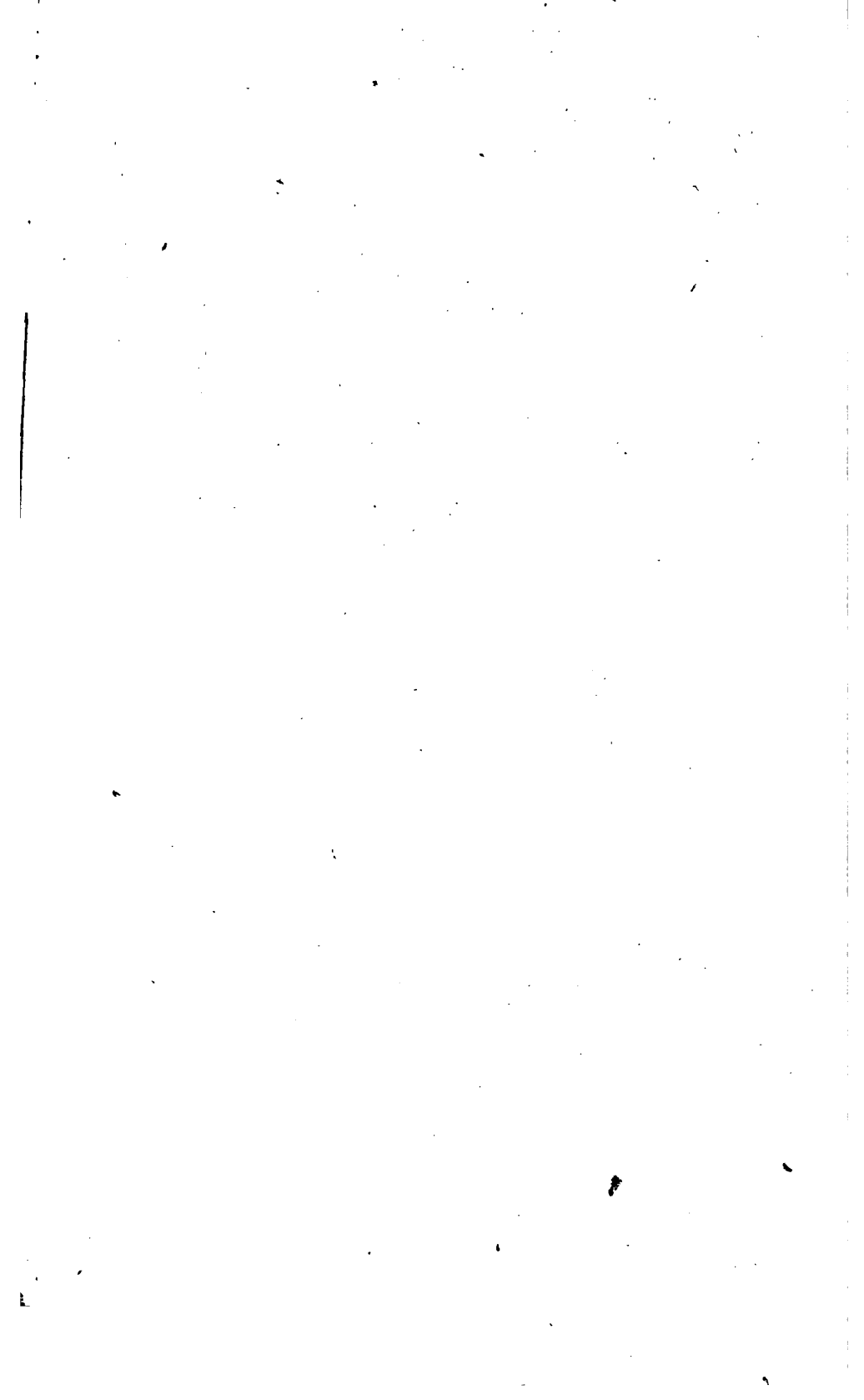
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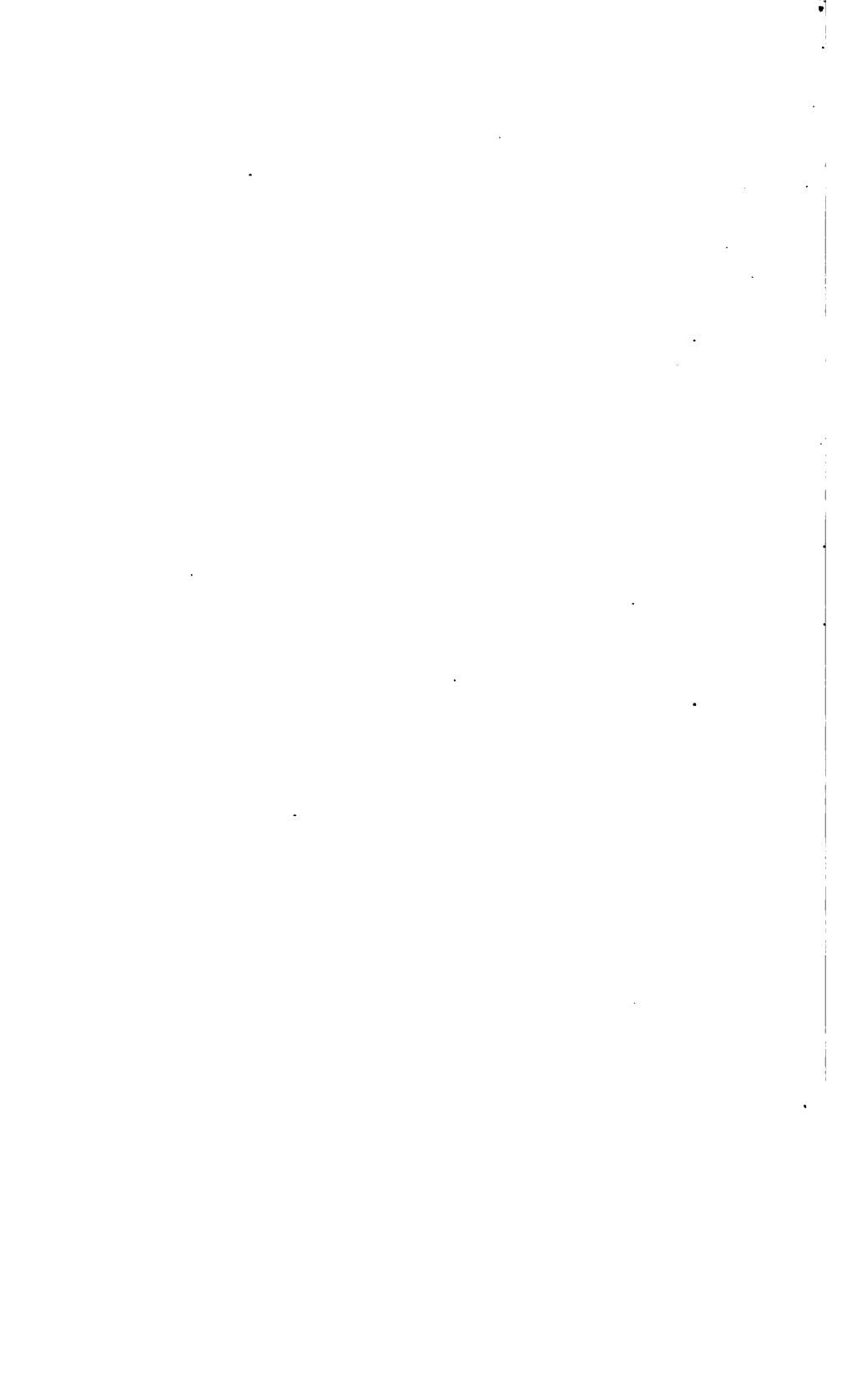


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UNIV. OF V. I.

FEB 23 1907

A SYLLABUS

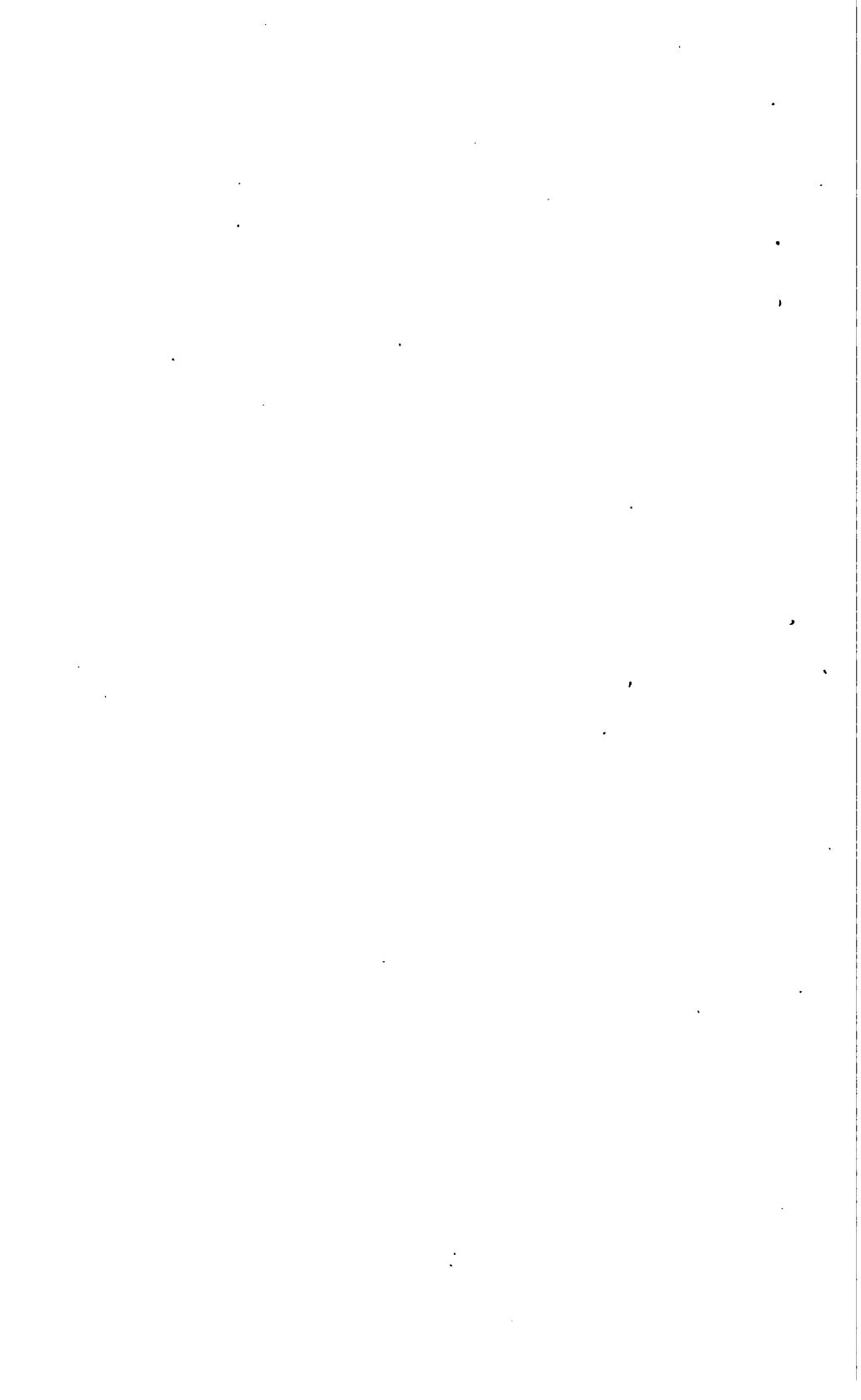
— OF THE —

HEALTH LECTURES

— IN —

AMHERST COLLEGE,

1896-97.



THE SUBJECTS

STATEMENTS AND FACTS

UPON

PERSONAL HEALTH

USED FOR THE

LECTURES

GIVEN TO THE

Freshman Class of Amherst College.

"Mind lifts up, purifies and sustains the body. Mental and moral activity keeps the body healthy, strong and young, preserves from decay and renews life."—JAMES FREEMAN CLARKE.

FIFTH EDITION.

AMHERST, MASS., SEPTEMBER, 1896.

PREFACE.

This pamphlet is an outgrowth of several familiar talks or lectures which have been given to the Freshman class in Amherst College for the past twenty-five years, very soon after their entrance.

The portions of the text in italicised type are the immediate subject of the lecture. And the remainder of it consists of the statements, and usually the authorities, for the principles or facts which are brought forward.

E. HITCHCOCK.

PRATT GYMNASIUM, SEPT. 14, 1896.

NON QUAM DIU, SED QUAM BENE VIXERIS REFERT.

PRELIMINARY AND GENERAL.

AMHERST COLLEGE AIMS TO DEVELOP AND CULTIVATE *the whole man*. *Body, Soul, and Spirit* are the points of a well balanced man.

An imperfectly balanced man goes to the wall sooner or later.

The *character* more than the *intellect* determines a man's success in college. His brains may be the propelling *power*, but his character will *steer* the craft.

DIFFERENCE BETWEEN COLLEGE AND OTHER STUDENTS.—(a) Greater things are expected of them. (b) Supposed to be lively gentlemen. (c) Placed very much under self control. (d) Not amenable to petty punishments, restraints, or supervisions. (e) In the determinative period of life. Habits, manners, and methods of College generally mark a man through life.

SOME PRACTICAL HINTS.—(a) *Relation to the Faculty*. Are your best friends. Your success their pride and comfort. They will believe in you till you show yourself unworthy. They will labor to help you labor. Both are heirs of the College. (b) *Relation to other Classes*. No disgrace that you are Freshmen, but still you are the youngest class. Yield proper respect to them as older brothers. But this does not imply the tolerance of insult or abuse. Never be too quick to scent an insult. Show a Christian manliness whether it is manifested to you or not. (c) *Practical jokes* are most dangerous tools. You never know which is edge and which is handle. (d) *Self Government*. Our system does not dispense with laws and rules, but makes you largely the administrator of these rules. A contract is made between Faculty and Students, and either party failing to fulfill his part, makes the contract not binding on the other party. (e) *College and Class Spirit*. A proper amount healthful. But no man can escape personal responsibility by a class vote. (f) *Individual Spirit*. Cultivate a "will" and a "won't". Make them both controlled by common, moral and religious sense. Be honest, square, reliable and true, rather than to try to be

popular. Don't float with the current unless you know this takes you in the right direction. (g) Have a *counsellor*, or two. Take time to find such a friend. (h) Take *care of your money*, and keep an accurate account of every cent. (i) A religious basis of life the only safeguard; and make it a source of joy to you, and power in you.

Make the most and best of yourselves.

A man is "*sifted*" by his classmates long before he gets to graduation day.

No man who *strives* or *crawls* to be popular ever will be.

It is better to help young people to their duty by a sense of honor than by fear of punishment.—*Terence*.

"Universities" (i. e. colleges) said John Stuart Mill, "are not intended to teach the knowledge required to fit men for some special mode of gaining their livelihood. Education makes a man a more intelligent shoemaker, if that be his occupation, but not by teaching him to make shoes; it does so by the mental exercise it gives and the habits it impresses."

The most precious gift of education is not the mastery of sciences for which special schools are provided, but noble living, generous character, the spiritual delight which springs from familiarity with the loftiest ideals of the human mind, the spiritual power which saves every generation from the intoxication of its own success.—*George William Curtis*.
[Chancellor's Convention Address, 1890.]

The Earl of Shaftesbury said "the man required for the coming generation. We must have nobler, deeper, sterner stuff; less of refinement and more of truth; more of the inward, not so much of the outward gentleman; a rigid sense of duty, not a 'delicate sense of honor'; a just estimate of rank and property, not as matters of personal display and enjoyment, but as gifts from God, bringing with them serious, responsibilities and involving a fearful account."

Always speak the name of God or Christ reverently, and highly esteem as many good persons and things as you can.

If you are skeptical on what are called well settled religious matters, don't formulate or treat your uncertainties as convictions

The most important thought—said Daniel Webster—that ever entered into my mind, was that of my personal responsibility to God.

"When you are a full grown man, you must be a good boy still."—*George MacDonald*.

The only thing of moment in life, or in man, is character.—*Dr. Thomas Arnold*.

At bottom each one of us is solitary, alone with God.

The really instinctively scholar, is instinctively a gentleman. But scholarship may be acquired and so may the gentlemanly habit.—*Dr. R. D. Hitchcock.*

If I have one vice, and I can call it by no other name, it is not to be able to say no.—*Abraham Lincoln.*

The contact with his equals in the class and on the play-ground is the best education a boy ever gets.—*Charles Francis Adams.*

We must be gentle now we're gentlemen.—*Shakespeare.*

Manners are not idle, but the fruit of noble nature and of loyal mind.—*Tennyson.*

A beautiful behavior is better than a beautiful form ; it gives a higher pleasure than statues or pictures ; it is the finest of the fine arts.—*R. W. Emerson.*

Although genius commands admiration, character most secures respect ; while the former is admired the latter is followed.—*Samuel Smiles.*

Habit outreasons reason and outreasons life.—*Dr. Lyman Abbott.*

"Tell me with whom thou goest and I will tell thee what thou doest."

Culture depends on character and ends in character, and has little to do with the amount of acquisitions in other directions.—*Professor E. C. Norton.*

President Woolsey has said that education consists in character, culture and knowledge, and in this order.

Men make work, but work makes men.—*Professor Drummond.*

I would have you remember that nothing but hard work will enable a man to get on. It is not always the man of most talent and genius but the hard worker that gets on.—*Dr. G. Marion Simms.*

Education is not a dead mass of facts, but power to work with the mind.—*Dr. Schaff.*

Try to have somebody to highly respect—perhaps reverence—whom you are not as familiar with as with a chum.

Don't be seized with the "vagaries of a liberty not tempered with reverence.—*Dr. A. P. Peabody.*

"The fundamentals for right living are, a happy disposition, plenty of sleep, a temperate gratification of all the natural appetites, and the right kind of physical exercise."—*B. W. Richardson.*

LABOR VITÆ VITA EST.

PHYSICAL EDUCATION.

The minimum amount of muscular exercise and bodily exposure to air and sunlight, is a daily duty of every human being to be placed side by side with his spiritual relations to God.

Intellect in a weak body is like gold in a spent swimmer's pocket. The first requisite of good generalship is good health. The professional and business man needs health rather than strength.—*Dr. William Matthews.*

The weaker the body is the more it commands; the stronger it is the more it obeys.—*Anon.*

Health must be earned; it cannot be bought.—*Dr. H. H. Hamilton.*

A man too busy to take care of his health is like a mechanic too busy to take care of his tools.—*Anon.*

Professor Blackie says: There is nothing a student ought to be more careful about than the sound condition of his flesh and blood.

Professor Tyndall says: Take care of your health. Imagine Hercules as oarsman in a rotten boat; what can he do there but by the very force of his stroke expedite the ruin of his craft?

It is a remark of Mrs. H. B. Stowe that the foundation of all intellectual and moral worth must be laid in a good healthy animal.

Disease is not a consequence of life; it is due to an unnatural condition of living, to neglect, abuse, or want.—*Col. Waring.*

Health is a thing to be attended to continually; you are to regard it as the highest of all temporal things for you. Health and holiness are synonymous.—*Carlyle.*

Mon devoir 'a moi 'c est de couserver.

Health should be valued as next to a good conscience; but the more health the better conscience.—*W. T. Clarke.*

The first requisite of a gentleman is that he be a good animal.—*R. W. Emerson.*

To be well is the first duty of man.—*Dr. Lyman Abbott.*

'Tis not a soul—'tis not a body we have to deal with, but a man; and we must not divide him.—*Montaigne.*

There is but one temple in the universe, and that is the body of man. Nothing is holier than that high form.—*Novalis.*

Everybody knows that his physical body is his means of being and doing. He knows that to this end he must respect, care for, yes, *revere* his body.—*Axel Gustafsen*.

It is a part of our sin that we are sick ; it is a part of our religion and duty to be well.—*Munger*.

There is no possibility of exaggerating the importance of fostering and caring for the body of man.—*Dr. Ackland*.

This body is a temporary trust, for the uses of which we are responsible to its maker.—*Sir Richard Owen*.

If we are to devote our attention before all things to what can be measured and weighed, the living man is the first object which demands our investigation.—*Carl Voght*.

By no means can man approach nearer the gods than by conferring health on mankind.—*Cicero*.

To be strong in health is a duty we owe to ourselves, to our ancestors, to our posterity.

The lives of men are in their own keeping, and with a heavier responsibility than they are willing to admit.

Every man is mainly responsible for his condition of body or mind.

I never shall be Milo, and yet I do not neglect my body.—*Epictetus*.

So every spirit as it is most pure,
And hath in it the more of heavenly light,
So it the fairer body doth procure
To habit in, and it more fairly dight
With cheerful grace and amiable sight ;
For of the soul the body form doth take,
For soul is form and doth the body make.—*Spenser*.

Physical culture aims to unfold the natural and symmetrical beauty of the human body, making it fit and capable in every phase of moral life to carry out the will of the supreme master—the mind.—*Carl Betz*.

It is to be borne in mind, first and always, that what is aimed at by physical education is not the production of athletes, but such a development and training of the body as shall make it a healthy organism, able to accomplish all that may reasonably be required of it.—*Dr. C. F. Withington*.

The successful men in life are those who have stored up such physical health in youth that they can in an emergency work sixteen hours in a day without suffering from it.—*Professor Huxley*.

Fresh air, pure water, good food, a clean skin, sound sleep, temperance and exercise are the seven simples of man's health.—*Dr. A. L. Gihon*.

Carlyle says there is no kind of achievement in the world that is equal to perfect health.

If a boy or girl can be given but one thing in life, next to character, that thing ought to be training.—*Christian Union*.

And what a change in our moral and religious life will be made by good health. What a cheerful courage and hope it will give.

NON EST VIVERE, SED VALERE IN VITA.

CARE OF THE MUSCLES.

Power or strength of some kind sought after by everyone. It depends greatly upon development and training.

PHYSICAL EXERCISE attends primarily to the proper use of the muscles. This requires (a) *regularity*, the most important element even if it be excessively much or excessively little; or if it be costly, inconvenient, or with some hardship. (b) *Amount* may be expressed in foot pounds, but better determined by systematic out and indoor exercise and abandon, under intelligent direction of two hours daily. (c) *Time*. Every kind of effort is best made early in the day, but to the student the hour of evening twilight is next best, in order to favor tired eyes and nervous system. (d) *Place*. Out of doors in fair weather best. (e) *Clothing*. With as little and loose as convenient, no bands or belts. (f) *Temperature* from 50° to 60° Fahrenheit: so high that but little clothing is necessary for warmth, and so low that there can be no danger of of a chill when allowing temporary rest. (g) *Slow off*. Vigorous exercise must be gradually stopped, often with a walk. (h) *Bilateral exercise*. Use the left as much, and as much alike the right side of the body as is possible. (i) *Mental and social* surroundings should by all means be agreeable and attractive. (j) *Care of body after exercise*. A dry rub, or better a spray bath and then dry rub, short and quick. (k) *Out door exposure*. Every one who studies his own health will be out of doors from one to two hours no matter what the weather. (l) *The best kind of exercise*. (m) *Our system commended for* (1) regularity; (2) time; (3) ease and surety; (4) temperature and weather; (5) fitted to different constitutions; (6) social relations.

Athletics. Base Ball. Foot Ball. Tennis. Bicycle.

Erect position and the gait of the body.

Always have an *extra garment to put on after hard exercise*. Race horses are treated so.

Danger of over or excessive training, and prolonged contests.

One physiological value of muscular exercise is to *promote the waste of the body*, another, *its action on the heart and lungs*, and their secondary influence on the other organs by the more ready supply of pure blood in abundant quantities.

Cardiac strain an imminent peril to over-exercised or over-trained youth.

For symmetrical and esthetical development *muscles require training* that promotes agility and suppleness rather than great strength.

Ambidexterity to be cultivated in order to properly develop both hemispheres of the brain.

May it not be that the physical system requires for its full vigor the discipline that comes with the effort to accommodate itself to harsh natural conditions ?—*O. B. Frothingham*.

The great need of brain-workers to-day is the best health and not immense muscular strength.

Take so much exercise as is needful for health ; but not so much as will conduce to the greatest bodily strength.—*Cicero*.

"*Strong men* are not noted for longevity." Greek athletes were short-lived men. "Excessive activity of an organ leads at last to a morbid condition of it."

It is the *health* rather than the strength that is the great requirement of modern men at modern occupations. It is simply that condition of body, and that amount of vital capacity which shall enable each man in his place to pursue his calling and work on in his working life, with the greatest amount of comfort to himself and usefulness to his fellow men.—*MacLaren*.

We want not only exercise but *exposure*: daily exposure to the health-giving inclemencies of the weather.—*Hamerton*.

President Garfield says : There is no way in which you can get so much out of a man as by training ; not in pieces, but the whole of him ; and the trained men, other things being equal, are to be the masters of the world.

The condition of the muscular system is an almost unfailing evidence of the general state of the body.—*Dr. Austin Flint*.

For exercising all the muscles of the body, there is nothing however like good systematic work in a gymnasium.—*Dr. Willard Parker.*

Every man in the country whose life is indoors ought so to divide his time, that come what may he will be sure of his out of doors in the late afternoon when the day's work is nearly or quite done.—*Professor Blakie.*

What is certain, is, that violent exertion is by no means necessary for the best hygienic results.—*Dr. McSherry.*

When the accomplishment of particular feats is made the object of physical training, the result will be injurious to health. The highest development of strength, activity and grace is not found, and cannot be found, in the same individual; health being maintained only in a body where life's forces are well balanced.—*Dr. D. A. Sargent.*

A day laborer in performing a healthy day's work expends that amount of energy which will lift 150 tons one foot. This is equivalent to almost nine miles of ordinary walking.—*Dr. Haughton.*

A healthy boy or young man may do almost anything, but until 22 or 23 years of age prolonged effort, such as races, tug of war, etc., is inadvisable.—*Dr. H. N. Martin.*

Dr. Martin suggests five miles as a healthy daily walk for a business man.

No better traveling habits than hardy habits.—*Sir Samuel Baker.*

In health to be stirring shall profit thee best;
In sickness hate trouble, seek quiet and rest.

—*Thomas Tusser.*

AMUSEMENTS, ATHLETIC GAMES, etc. are working evil in us when they—

1. Dominate or control us; 2. Take too much time or money; 3. Give tone and character to our lives; 4. Are indulged in to excess; 5. Become a necessity to us; 6. Are enjoyed and employed for other than the legitimate purposes of recreation and exercise.

But they are working good in us 1. When they give us all around physical strength; 2. When they insure to us a reliance upon and a knowledge of our physical and mental powers combined; 3. When they help us to control our temper and our spirit; 4. When they teach us the proper treatment of a competitor; 5. When they keep us in such a condition that we do not know we have a body that needs to be cared for save during the hours of exercise and recreation.

Alertness, (agility) endurance, and strength, (in this order) to be sought after in muscular training.

"I have often thought that my life was saved and my health restored by exercise and exposure.—*Gen. U. S. Grant.*

If an organ be required to do work, it needs 80 per cent. more blood than when at rest.

"You should be strong in body, because the soul depends upon the body for its instruments. There are many who are wicked only because they are weak. Many a youth becomes morally depraved because he has been a stranger to fresh air, cold water and vigorous exercise. Bodily weakness is often the strength of appetite and passion. For the more active, energetic, aggressive forms of virtue, physical strength is often an essential prerequisite."—*Dr. A. P. Peabody.*

His chosen amusements must not deliberately add to the "weight" he is commanded to lay aside.—*Hannah Moore.*

It is seldom that a man, other things being equal, meets with marked success in any calling, if he be constitutionally feeble. In the professions, with equal acquirements, intelligence and opportunities, it is the physically strong who succeed, and it is the strong who make their opportunity.—*Dr. Austin Flint.*

They mistake muscle for strength.—*Julian Hawthorne.*

Muscular fatigue and lameness may often be relieved by rubbing, tapping, kneading, or pinching the affected parts.—*Dr. B. G. Wilder.*

"Few realize what physical vigor is in man or woman, or how dangerously near weakness often is to wickedness; how impossible healthful energy of will is without strong muscles which are its organ, or how endurance and self control no less than great achievement depend on muscle habits. Both in Germany and Greece a Golden Age of letters was preceded by about a generation, by a golden age of gymnastic enthusiasm, which constitutes, especially in the former country one of the most unique and suggestive chapters in the history of Pedagogy. Symmetry and grace, hardihood and courage, the power to do everything that the human body can do with and without all conceivable apparatus, instruments, and even tools, are culture ideals that in Greece, Rome and Germany respectively have influenced, as they might again influence, young men as intellectual ideals never can do save in a select few."—*Pres. Stanley Hall.*

The bicycle has come to stay. It means enlarged health for men and women. Consult the physician, and ride up to the limit of weariness. Let the fools do the scorching, and wear the "Ram's Horn." And the essential power should be an erect body on the treadles.

APETITUS RATIONI PAREAT.

FOOD AND DIGESTION.

Men more than any other natural group of animals require and tolerate a great variety of food. This is partly owing to anatomical structure, and partly to the ability to prepare food in many ways. No natural function controls us more than food and its assimilation. But we have *individualities* in the choice and effects of food. This is owing to (a) education ; (b) natural tastes ; (c) unnatural tastes ; (d) inherited or acquired disorders ; (e) temptation of cookery.

The rate of eating should be slow, (a) that the food may be masticated and mixed with saliva ; (b) that the stomach may not be too suddenly loaded ; (c) that we may enjoy the taste of the food.

The *variety of dishes* may be great for a period of time, but small at a single meal. Be accustomed to all wholesome food.

The *number of times to eat* in 24 hours should vary from two to four. Should not abstain so long as to feel the want of food, nor eat so often as to be oppressed by it.

The *amount of food varies*. About two pounds of water-free food and a quart of fluid may be taken as a standard.

The temperature of the food should range from 60° F. to 120° F.

Hot or cold food or drink not only disturbs the membrane of throat and stomach, but gives an unhealthy nervous reaction.

Coffee, tea and chocolate in limited quantities, may be regarded as healthful for adults.

Condiments—saving table salt—are unnatural provocatives to digestion. The fewer the better.

The *coarse-grained farinaceous foods* should be used freely by brain-workers.

Begin the work of the day with something in the stomach.

Influence of the mind on digestion.

Attention to *regular and free discharges from the bowels* a preëminent duty. Effect of habit here.

Hurried breakfasts.

Ice Water Dyspepsia, and Diarrhoea. Ice benumbs the stomach.

Care of the teeth. Soap, tooth brush, toothpicks and dentist.

Students want *plain food* of the best quality. *Pork and pastry* are not brain food, nor fried dishes either

Eat as you clothe yourself: never in the extreme of fashion—too much or too little.

Rest, not exercise, immediately after meals.

After a long and hard evening's study a little food may be favorable to sleep.

"*Eat what you like*," only a half rule.

A scientific or physiological diet for an adult, per day, is two pounds of bread, and three-quarters of a pound of lean meat.—*Huxley*.

One-third meat—beef, mutton or fowl—and the rest farinaceous, saccharine and vegetable acids, and fish foods, a good diet for students.

Dr. Parker says eight to ten ounces of lean meat per day.

Man is omnivorous, requiring for his most perfect development a greater variety of food than any other animal.—*Dr. F. H. Hamilton*.

"Next to anxiety the worst foe to digestion is hurry."

Fat paunches have lean pates !
And dainty bits make rich the ribs,
But bankrupt quite the wits.

—*Shakespeare*.

"The deadly effects of the frying-pan and pie are no longer secrets."

In matters of diet many persons have individual peculiarities; and while certain fixed principles exist, in the detail of their application to each man's wants, an infinity of stomach eccentricities is to be reckoned on.—*Sir Henry Thompson*.

"*Man* is clearly omnivorous, while *men* may be advantageously vegetarian in one climate, mixed eaters in another, and exclusively flesh in a third."

Nothing interferes so much with brain work as over eating.—*Hamerton*.

Dr. Parkes says: A young man should eat until the appetite is appeased: provided always he does not improperly stimulate it by condiments, and that he is taking exercise—mental and bodily—in proper proportions.

Simple diet is best, for many dishes bring many diseases.—*Pliny*.

Digestion should give no sensation.—*Dr. Parkes*.

The food should get into the blood early in the day, and a good breakfast, and a good dinner at 12 or 1 o'clock, are by far the best meals for this time of growth (youth).—*Dr. Parkes*.

Chatted food is half digested.—*Lord Chesterfield.*

'L aisance et les bonnes moeurs sont les meilleurs de l' hygiene—*Bouchardt.*

To be free-minded and cheerful at hours of meat, and of sleep, is one of the best principles of long lasting.—*Lord Bacon.*

" There is a great moral profit in being well fed."

" The stomach should not be disappointed when it expects to be replenished."

" When drunk in moderation coffee refreshes and supports the body, and makes the food consumed with it go further than it otherwise would."

His conscience is satisfied which is a great thing for digestion.—*S. O. Alibone.*

Let your food be simple and drinks innocent, and learn of wisdom and experience how to prepare them aright.—*Tyron, 1691.*

" Delight not in meats and drinks that are too strong for nature, but always let nature be stronger than your food."

The brain is often credited with achievements that belong to digestion. * * * * The greatest poets are blessed with good digestion as well as brains.—*Dr. William Matthews.*

Beware of sudden change in any great point of diet, and if necessity enforce it, fit the rest to it.—*Lord Bacon.*

Load neither thy stomach nor thy understanding.—*Jeremy Taylor.*

Anxious thoughts disturb digestion.

After dinner sit a while ;

After supper walk a mile.

Good broth and good keeping do much now and then ;

Good diet with wisdom, best comforteth man.

—*T. Tusser.*

Now good digestion wait on appetite and health on both.—*Shakespeare.*

A fourth from the animal kingdom, with three-fourths vegetable produce, would furnish greater variety for the table. tend to maintain a cleaner palate, increased zest for food, a lighter and more active brain, and a better state of health for most people not engaged in the most laborous employments of active life.—*Sir H. Thompson.*

" Give me the control of your kitchens for ten years and I will empty your jails of juvenile offenders."

VINUM EST VERUM NATURAE NOSTRAE INFIRMITATUM SPECULUM.

ALCOHOL.

Alcohol is a *narcotic stimulant*. What is narcosis and what is stimulation?

It is a *medicine* (medeor). It is not food.

Healthy, young, vigorous people are in no need of it.

Its effect is primarily on the *nervous system*.

It *exhausts our reserved force*.

Destroys inhibitory force.

Supplies only temporary force.

Its constant use makes a *slave* of a man. The habit has him. Its use blunts the sense of pain, of decency, morality and spirituality.

It *paralyzes* and removes the highest restraints of our nature.

The law of increase its greatest harm.

It *overrides the will and self control*.

Its use is *no recommendation* for character.

10% of deaths are due to alcoholic intemperance.

35% of the insane are due to alcoholic intemperance.

75 to 90% of all in penal and pauper institutions.

45% of Idiots from drunken parents.

A strictly temperate young man at 20 years of age may expect to live 44 years and 2 months; while a moderate drinker under the same conditions, can expect only 15 years and 6 months.

Are the men and women of the highest intellectual and spiritual attainments within our acquaintances those who use alcohol or tobacco?

The best thing to be said for alcohol outside of the medicine chest is, that it is a tremendously expensive luxury, and a dangerous one.

After an emergency, alcohol may be medicine: before, it is a poison.
—Prof. B. G. Wilder.

Alcohol in small doses is of great use in conditions of temporary want and where the food is in insufficient quantity.—Landois & Sterling.

It is a valuable and powerful instrument in the hands of the physician, but it is an instrument that cuts both ways. It is a safe rule for the inexperienced, not to handle double-edged tools.

"Alcohol may be classed as a food: that it does supply a temporary force as a whip does urge on a horse, But there is a reaction from the force of alcohol and a demand for increase which does not obtain in the food stuffs of the body."

A young man or woman who takes alcohol in this period (youth) is laying the foundation of a habit, and this habit has a most dangerous side. Prudence then counsels what knowledge recommends, and that is, to abstain from what is not a useful friend, and may easily become a deadly enemy.—*Dr. Parkes.*

The regular routine employment of alcoholic stimulants by man in health, is never, under any circumstances, useful.—*Dr. H. F. Hamilton.*

Work done under the influence of stimulants is unhealthy work, and tends to no good.—*Professor Blackie.*

There can be no question that the influence of alcohol is vastly greater and more numerous in its effects on the brain when used during the period of youth and early manhood.—*Dr. H. P. Stearns.*

With advancing knowledge, there is no longer any justification for the supposition that alcohol fosters vital heat or imparts vital force: for science has demonstrated that the sensations which seem this in either case are opposed to the fact: that alcohol harms the temperature, lessens the powers of resistance, and at the bottom is not a stimulant at all but rather a parylizant.

To escape the evils arising from the use of alcohol, there is only one perfect course, namely, to abstain from it altogether; no fear need be entertained of any physical injury, or mental harm from such abstinence. A man or woman who abstains is healthy and safe. A man or woman who indulges at all is unsafe. A man or woman who relies upon alcohol for support is lost.—*Dr. Richardson.*

Sir Henry Thompson says: Of all people who *cannot stand alcohol the brain workers* can do so the least.—It is idle to say that there is any real necessity for persons who are in good health to indulge in any kind of alcoholic liquor. At the best it is an indulgence which is unnecessary; at the worst it is a vice which occasions infinite misery, sin, crime, madness and disease.—*Henry Maudsley.*

Healthy young men can never require such a stimulant.—*Professor Blackie.*

Wine is better borne with a life of physical industry, than one of mental labor.—While alcohol revives the exhausted man, it takes the force out of one who has work before him.—*McSherry.*

The habitual use of fermented liquors to an extent far short of what is necessary to produce intoxication, injures the body and diminishes the mental power. A large proportion of the most painful and dangerous maladies of the body are due to the use of fermented liquors taken in the quantity which is conventionally termed moderate.—*Sir Henry Thompson.*

Among persons selected with care for physical soundness and sobriety, the death rate is more profoundly effected by the use of intoxicating drinks than from any other cause, apart from heredity.—*President of Life Insurance Co.*

The following conclusions are found on the "Use of Intoxicants and Narcotics in Relation to Intellectual Life," by A. A. Reade :

1. Alcohol and tobacco are of no value to a *healthy* student.
2. The most vigorous thinkers and hardest workers abstain from both stimulants.
3. Those who have tried both moderation and total abstinence, find the latter the most healthful practice.
4. Almost every brain worker would be better for abstinence.
5. The most abstruse calculations may be made, and the most laborous work performed without artificial stimulants.
6. All work done under the influence of alcohol is unhealthy work.
7. The only pure brain stimulants are external ones, fresh air, cold water, walking, riding, and other out door exercises.

Psychological Society's report says : " Had never seen a permanent return of mental health among those who had once been committed as insane from intemperance."

Don't wait till you are hurt by a habit before giving it up, but find out its ordinary tendency and act accordingly.—*Lord Bacon.*

Oh, that men should put an enemy in their mouth to steal away their brains.—*Mary Briggs.*

Alcohol is no necessity of man ; it is out of place when used for any other purpose than a medical, chemical, or mechanical one ; it is no food ; it is the most insidious destroyer of health, happiness and life.—*B. W. Richardson.*

Drunkards beget drunkards.—*Plutarch.*

The children of drunkards are not likely to have sound brains.—*Gellius.*

Healthy young people need neither tea nor coffee, and are liable to be injured by alcohol in any form.—*Dr. B. S. Wilder.*

Dr. Alexander R. Simpson of Edinboro says :

(1.) Alcohol habitually used can of itself produce disease from which the abstainer remains exempt.

(2.) It will aggravate diseases to which all are liable.

(3.) It renders those who habitually use it more open to attacks of various forms of illness.

(4.) The alcoholicist has a worse chance of recovery from a fever or any injury than an abstainer.

(5.) In the crisis of disease the alcoholicist gets less benefit from stimulants than the abstainer.

In excessive doses it induces progressive paralysis, affecting the nervous tissues in the inverse order of their development, the highest center being affected first and the lowest last. The judgment is first affected, the motor centers and speech next, then the cerebellum, next the cord, and lastly the centers essential to life.—*Dr. Hammond.*

**OMNIA MIHI LICENT, SED EGO SUB NULLUS
REDIGAR POTESTATE.**

TOBACCO.

Tobacco is a *narcotic*. *Narcosis is paralysis.*

Gives *sensation of comfort* in ordinary doses.

Adds no force of *any kind to the user.*

Forbidden to men in muscular training.

Narcosis makes the most helpless slave of a man.

Takes away will power. Tobacco and alcohol usually complementary.

More injurious to youths than to adults.

Forbidden to Cadets of Annapolis Naval School and West Point Academy.

The law of increase the great peril in its use.

The financial consideration condemns it.

Its use takes away a power to resist disease.

Smoking on the street is not "good form."

A prominent cause of *nervous and heart diseases*,
Why cigars and cigarettes are specially injurious.

Most injurious to those of sedentary occupations.

Tobacco destroys delicacy and impairs the moral sense in most persons.

Smokers are physically depressed and deplorably deficient in muscular and mental power.—*Lancet*.

The Swiss Republic forbids its sale to minors under 15 years.

I believe that no one who smokes before the bodily powers are developed, makes a strong, vigorous man.—*Dr. Ferguson*.

I have never seen the young man whom I thought could be benefited by smoking: while I could count by the hundreds those whom I have known to be injured by the indulgence.—*Maclaren, Director of Oxford Gymnasium*.

The earlier in life tobacco is used, the more conspicuously its worst consequences are shown.—*Dr. Kirkride*.

The temporary stimulus and soothing powers of tobacco are gained by destroying vital force.—*Quarterly Journal*.

In my opinion the best physical performances can only be secured through the absolute abstinence from the use of alcohol and tobacco.—*Edward Hanlon*.

So long as the practice of smoking is continued the smoker is temporarily out of health.—The effect of tobacco on the minute vessels, is to cause contraction of them, resulting in impaired nutrition, especially of the nerve centers.—Among those persons who are total abstainers from alcohol, few are found who can bear tobacco in the most moderate use of it.—Under tobacco the heart seems rapidly to run down in power, and alcohol is called for to whip it up again.—If a community of youths of both sexes were trained to early smoking and if marriage were confined to them, an inferior race of men and women would be born.—Tobacco smoke does not produce structural or organic nervous change, although it keeps the nervous system in a continual state of instability and debility.—*Dr. B. W. Richardson*.

I have no difficulty in recommending young men not to smoke. Youths are far more affected by tobacco than men.—*Dr. Parkes*.

The public use of tobacco in any form is an infringement upon the comfort of others.—*Prof. B. G. Wilder*.

Beyond all other things the future health and usefulness of the lads educated at this school (Annapolis Naval School) requires the absolute interdiction of tobacco.—*Medical Director, A. S. Gihon*.

"Tobacco injures native born Americans sooner and perhaps more than Germans: those of nervous temperament and sedentary life soonest and most fatally."

"The man who can live under the influence of tobacco and rum can live longer without them."

Tobacco smoking often causes an intermittent pulse. Out of 81 smokers examined 22 presented this symptom.—*Decaisne*.

The most prominent cause of rejection (from the Annapolis Naval School), has been from irritable heart, found most frequently in boys with abnormally developed sexual organs, or who use tobacco to excess.—*Dr. Magruder*.

It lessens the natural appetite, more or less impairs digestion and induces constipation; while it irritates mouth and throat, rendering it habitually congested, and destroying the purity of the voice.—*Stillé*.

It is in the main a functional disturber, and does not produce organic disease.—*Dr. Dennis*

It causes death quicker than any other poison except prussic acid.—*Stillé*.

When the sight fails with smokers and no appreciable change of structure can be found in the eye, tobacco poisoning may be assumed.—*McSherry*.

Dr. Acton says: I am quite sure that excessive smokers if very young, never acquire, and if older rapidly lose their normal virile powers.

The use of tobacco in early life cannot be too strongly condemned as impairing greatly, if not wholly destroying the chances of success as students and scholars.—*Dr. G. F. Wilder*.

In the *Ecole Polytechnique* of France, a comparison made between the smokers and non-smokers showed that the non-smokers took the highest rank in every grade, and further that the smokers continually lost grade, and in 1861 the Minister of Public Instruction of France accordingly issued a circular forbidding the use of tobacco by pupils in the public schools.

Sir Isaac Newton was unwilling to smoke "because he would make no necessities to himself."

King James said: Tobacco bewitches him who uses it: he cannot leave it off.

I used to smoke but I found it injured my voice, so quit it.—*Edwin Forrest*.

Its use—"tobacco"—calls into play the subtle law of increase that renders moderation a difficult thing to secure. Tobacco and alcohol are nerve stimulants; stimulated nerves mean at best irritated nerves, and irritated nerves clamor forever.—*T. T. Munger.*

Tobacco paralyses the moral sensibilities more than almost any other habit in which civilized men indulge.—*Dio Lewis.*

I have often heard of people being injured by smoking too much, but I never heard of any one suffering from not smoking at all.—*R. S. Ball.*

My experience as an educator convinces me that tobacco is doing as much harm to the rising generation, as is alcohol to persons of mature years.—*Professor R. E. Thompson.*

Let the smoker hang up this plaque in his room "a brain enfeebled and a will enslaved."

One can make the general rule that cigarette smoking is far the most injurious form of smoking, and that no one can indulge in it to any extent without falling into dangerous excesses.—*N. Y. Tribune.*

Many boys who are examined for "apprentices" in the navy are rejected as liable to heart disease. This, the medical men say, is due to cigarette smoking.—A costly sacrifice was this life (General Grant's) to tobacco.—*Christian Union.*

Tobacco is nearly as dangerous and deadly as alcohol, and a man with a tobacco heart is as badly off as a drunkard.—*Dr. H. J. Bowditch.*

The evil effect of tobacco upon boys cannot be over-estimated. It is the cause here of more trouble than anything else, and when the boy leaves, it is the principal cause of his return to his former associates and bad habits.—*Superintendent Westboro Reform School.*

The excessive use of tea, coffee and tobacco, those curses of nervous people.—*Dr. C. F. Folsom.*

As a result of statistics gathered at Amherst College in 1891 it was found that the non-smokers were of greater weight than the smokers; that they were superior in chest girth to the smokers, and their lung capacity was higher. The non-smokers were more athletic than the smokers, and more successful in athletic sports.

The youth who can afford to smoke should ask for financial support nowhere.

The free use of tobacco in all its forms, but especially in cigarettes, is doing much to undermine the health of the rising generation, and is nearly as noxious as the evil of drunkenness.—*N. Y. Tribune.*

John Ruskin says : " Tobacco is the worst natural curse of modern civilization," and " it is not easy to estimate the demoralizing effect on the youth of Europe of the cigar, in enabling them to pass their time happily in idleness.

" No one can be prepared to reach swift and wise decisions if he has lamed his will by idle indulgence, or accustomed himself to study the world through a cloud of smoke."—*Congregationalist*.

MUNDITIA PIETATE EST PROXIMA.

SKIN.

The *component parts* of the skin.

The *uses of these* different parts.

It protects, absorbs, breathes, excretes, is contractile and sensitive.

The *amount of waste escaping through the skin*.

This escape more necessary than the introduction of food and air,

Care of *hair and nails*,

Sympathy between *skin and lungs*, and skin and the moral qualities.

Man's temperature is 98.7° F. The average annual temperature of Amherst is 48° F.

Temperature of a *sitting room* may vary from 60° to 70°. And the heated air of a sitting room should be 63% of the point of saturation of moisture.

Never sit or stand still with wet clothing on the body.

Warmth is equivalent to food.

What *hardening the body* should be.

Wash all the body except the hair of the head.

Always wipe the body perfectly dry.

A *daily cool sponge bath* a student's necessity.

A *weekly hot bath* a valuable adjunct, with a vigorous combing of the skin.

A *frequent dry rub* of great service.

After vigorous exercise when the skin is moist with perspiration, a spray bath and immediate soft dry rub the best of hygienic regimen.

To vigorous and athletic persons an anointing and massage with sweet oil an occasional benefit.

By day and by night have *clothing enough to be warm*.

Substantial overcoats and underwear two sine-qua-nons of Amherst students.

Importance of an air bath.

BATHING.

Temperature below that of the body.

Time early in the day.

Soap used when sweat and oil glands are excessively stimulated.

Stomach, not immediately after a full meal, nor when entirely empty.

Kind, hygienic luxury, the Turkish: a *cleansing* in the bath tub with soap and hot water; a *healthful*, the morning cool sponge; a *complement* to vigorous exercise, the spray and dry hot rub.

A short, well tempered spray bath—needle bath—often better than the tub.

Influence of the bath upon the nervous system.

The odor of armpits and feet not necessarily an evidence of neglect or uncleanness. *How to treat this.*

The best soaps for the surface of the body are Castle, Transparent, Glycerine, Lettuce, Pears or Ivory.

The skin surface of a man is about 1,550 square inches, containing 2,300,000 perspiratory glands, which make a continuous tube of $2\frac{1}{2}$ miles.

Skin the waste gate and sewer of the body.

About half of the food, air and water taken into the body passes off by the skin.

Nearly twice the amount of waste passes off through the skin as through the lungs, a proportion of 11 : 7.

The hair indicates much about temperament and sometimes character.

Injury to feet from improper shoes. Low heels and wide soles.

The skin breathes as well as the lungs.

Sweat glands affected by emotions and passions.

Should be 20 ounces of sweat discharged daily to maintain health.

Let warm water vapor enter every artificially heated room.

Temperature of rooms used in study or recitation may vary from 65° to 70°.

The morning, immediately after rising is the best time for a cold bath; the evening, just before retiring, is the best time for a warm bath.—Short shoes, high heels and narrow toes entail corns, bunions and unsightly deformities of the feet.—*Dr. F. H. Hamilton.*

Woolen and merino best for clothing next the skin at all seasons of the year.

"A dirty man will in most cases be a discontented, disagreeable and a dissolute man; for the condition of the skin has much more to do with a man's morals than is generally supposed."

A man "who may be taken as a fair type of a cleanly man belonging to a fairly cleanly household uses about 12 gallons of water per day. This covers all the water needed including a daily sponge bath.—*Rohé.*

Wear dark clothes in winter and light in summer. Have three changes of underclothing—heavy flannels for winter, light flannels for spring and fall, lisle thread, silk or open cotton for summer.—*Dr. D. A. Sargent.*

I have the conviction that in order to have the brain and the eye clear, you ought to make your skin act vigorously at least once in 24 hours.—*G. E. Boehm.*

"The dirtier people are in their persons the more delicate (sic) is their sense of modesty."

A woolen garment should be worn next the skin at all seasons and in all weather. At least once a week the whole body should be washed with soap and warm water. Open fire-place grate or open stove insure almost perfect ventilation and supply a pleasant and healthy warmth.—*Prof. B. G. Wilder.*

Custom and common consent have established 68° F. as the point below or above which there should be slightest possible range of temperature for inhabited rooms.—*Dr. W. F. Draper.*

As a general thing a person who is neat in his person, is clean in his morals.

Experiment tends to establish the value of personal cleanliness as a preventive factor (of contagious diseases) at least one-third.—*B. W. Richardson.*

There may be such a thing as a man clean outside and not inside; but if he is filthy without there is no need to go below the surface to

learn his standard of tastes and desires. * * * The Tobacco question! That depends on a man's standard of personal cleanliness.—
H. C. Trumbull.

The English authorities regard 62° to 65° as the proper temperature for living and study rooms. Should not cleanliness be looked upon in the direction of æsthetics and ethics as well as of Hygiene.

When lying down to sleep more clothing is necessary, than when in the upright position.

AER PURUS ET SENTENTIÆ COPIOSÆ ET VALIDÆ.

BREATHING ORGANS AND FRESH AIR.

Lungs *are large sacks*, for introducing air into the body and removing certain wastes from it; contain 600,000,000 cells; has a surface of 600 square feet, and is 40 times the area of the skin.

An abundance of air—the desideratum of health of the lungs.

The *erect posture* also. *Moisture essential.* Air *free from organic* and especially human *waste* impurities. Air *abundant* in *sleeping* as well as in living rooms. Keep *excreta* of the body *from inhalation*.

See if you "*blow*" *your average* at the Gymnasium.

Let every room have a foul air escape of at least 7 Inches square for each occupant.

We breathe 2000 gallons of air in 24 hours. We take about 6 pints of solid and liquid food in the same time.

Carbon dioxide is by no means so poisonous an element in the air as the organic impurities of the body.

The living organisms in the air as a source of disease.

The *temperature of a living* room should be from 65° to 70° F.

Use *thermometer* to decide temperatures.

The standard air space for living rooms should be 1000 cubic feet for each individual, and a *complete renewal* of the air three times every hour.

Take 50 conscious breaths every day.

In an audience or class room the *cubic space should be 50 cubic feet, with air renewed at the rate of 1 cubic foot per minute to each person.* In sleeping rooms this should be doubled.

The best and safest mode of heating now practiced is that in which the air drawn from without the building is passed through—or among—coils of pipes, filled either with steam or water.—*Dr. F. W. Draper.*

“Consumption—a disease in which nearly 40 per cent. of the mortality falls upon persons between the ages of 15 and 30.—*Dr. C. F. Folsom.*

A peculiarly unwholesome change appears to be wrought in the atmosphere by raising its temperature to any point higher than the boiling point of water.—*Dr. F. W. Draper.*

A public building is not properly ventilated until adequate means are provided for artificially forcing either the pure air in, or the foul air out of the room in question,

The fire-place, with its chimney, is the best type and illustration of this method, although it is hardly practical for school purposes. Let us by all means, in our houses at least, have the open fire-place, whatever else we have to promote pure air, equal warmth and good cheer.—*Dr. Draper.*

The really dangerous and offensive impurities (in the air used for breathing) are the organic matters thrown off in respiration —*Dr. J. S. Billings.*

Fly if you can
These violent extremes of air;
The wholesome is now moist, now dry.

We should have an area of 40 square inches open to the air.—*John Ericsson.*

“An open fire-place, fire or none, has become a fixed sanitary idea.”

Another extraordinary fallacy is the dread of night air. What air can we breath at night but night air? The choice is between pure night air from without and foul night air from within.—*Florence Nightingale.*

“A vitiated atmosphere the most potent and wide-spread of all the predisposing causes of disease.”

“An open window most nights in the year can never hurt anyone,”

Out of 41,777 deaths in Massachusetts in 1889, 5581 were from consumption, and 3490 from pneumonia.

A slow poisoning of the body caused by reabsorption of things eliminated from the lungs in previous respirations.—*Dr. H. N. Martin.*

Pure air kindles and sustains a fire within the body. Air and light are among the best medicines known to man. Night air is seldom if ever so poisonous as your own breath. Forty out of every 100 die of impaired air.—*Dr. F. H. Hamilton.*

"Man's own breath is his greatest enemy."

Air foul from human excreta and living organisms in the air, may render a perfectly healthy body susceptible to contagious disease.

We must breathe pure air and breathe deeply; be not afraid of night air; and get as much of air outside of doors as we can.—*Dr. J. M. Peebles.*

"One peculiar difficulty in ventilating is the fact of the adhesiveness of foul air, and especially that containing organic waste to material substances."

In general nature has provided two excellent disinfectants, which are plentifully supplied, and are quietly at work all the time wherever they are allowed a chance. I refer to sunlight and fresh air.—*Dr. George B. Shattuck.*

Nothing is more conclusively established than the fact that vitiated atmospheres are the most fruitful of all sources of disease.—*Playfair.*

The air of an unventilated bed room in the morning displays the typical characters of the organic matter which is given off by the skin and lungs of living animals.—*Dr. F. W. Draper.*

Angus Smith has estimated that 529,000 of them, (the living organisms of the air) may be found in a cubic foot of city air.

Deaths in the United States in 1880 from consumption amounted to about 12 per cent. of the whole number.

The same proportion in Massachusetts for 1889 was 14 per cent.

The danger of drafts of air is greatly exaggerated. One hundred people are injured by foul air where one is hurt by a draft.

The more one lives in the house the more tender does he become.

Pure air is one of the most powerful nervous and tonic sedatives that is known.

Six hundred liters of air per day is a safe limit of air for a full grown man.—*Huperz.*

"A single two-foot gas burner vitlates as much air as the breathing of six grown persons."—*Huperz*.

Furnish the sleeping room as *lightly* and as *slightly* as possible.

A kerosene lamp or a two-foot gas burner destroys for breathing purposes twenty-five meters of air per hour.

Thirty cubic meters should be the minimum cubic air space for a sleeping room, and the same space to be properly ventilated requires the hourly introduction and removal of ninety cubic meters of air—*Rohé*.

Those who live most of the time in the open air are the least likely to suffer from phthisis, because their lungs are accustomed to cold and are not to be irritated by it at night.—*London Lancet*.

A well or an ill ventilated room may really be responsible for much of our constitutional vigor or the reverse.—*Farquarsen*.

"More and more it is discerned that vigorous thought, placid temper, clear understanding and robust health are continuously possible only in an atmosphere such as nature intended mankind to breathe; whether it be in school, office, court-room, church, opera-house, or that beautiful outgrowth of advanced civilization, the refined home of the nineteenth century."—*Engineering Magazine*.

ORANDUM EST UT SIT MENS SANA IN CORPORE SANO.

BRAIN AND MIND.

The BRAIN and NERVES, *the most important organs of the body*, and at the same time those we know the least about in use and treatment. But they are sympathetic organs; depending largely on the condition and requirements of other bodily and mental faculties.

Brain, soul and spirit must act in harmony.

Regularity of work: mental, spiritual and bodily.

The normal expenditure of force is healthful.

Healthful work should be without fret or worry.

Importance of training for good brain work.

Time and methods for brain workers.

Best time of the day for student's work.

Our self-controlling, self-restraining, self-impelling power.

Time of students. Sleep, 8 to 9 hours, beginning about 10 o'clock; study, lectures and recitations, 9 hours; food, 3 hours; recreation, exercise and ease, 2 hours; personal, 1 to 2 hours.

The progress of events has thrown the work of sustaining life so largely upon the brain, that we are beginning to sacrifice the physical to the intellectual.—*Prof. John Fiske.*

In the matter of sleep students are great sinners; nay, their very profession is a sin against repose.—*Prof. J. S. Blackie.*

It is best taken from ten o'clock to six as a rule, and is best obtained by cultivating it as an automatic procedure.—*Dr. Richardson.*

You have no more right to overtax yourself, to go without sleep, than you have to overtax your horse.—*Spurgeon.*

I feel, I grieve, but never fret.—*John Wesley.*

"To make pleasures pleasant, shorten them."

Don't burn the candle at both ends. If you are an early riser retire early; but if you seek your sheets late, don't get up with the sun. You can't cheat nature, nor yourself. Mankind needs about so much rest, sleep and laziness, and any attempt to lessen it is at the expense of ultimate vitality and a surfeit of suffering. Professor Houghton says that three hours of severe study uses up as much vital force as a whole day of manual labor. The Jesuit's rule for rest and study,—never pursue the same study consecutively for more than two hours. When extra mental work is required, secure more rest and out of door passive exercise, and eat less (this means only for short periods). Overwork often brings its penalty months ahead in the shape of some disease, as fever, neuralgia, diphtheria, etc.

Joy, temperance and repose

Slam the door on the doctor's nose.

—*Longfellow.*

Take all you want (of sleep.) Take 8 hours; take 10 if you choose; but take them in the early hours of the night rather than at daybreak. Don't insult nature.—*Dr. J. M. Peebles.*

Let our sleeping arrangements be made for the highest and dryest place in the building possible.

In our waking moments, when the system is active and vigorous, we may be exposed with impunity to baneful influences, which in sleep may make an impression on us.—*Dr. Frank Wells.*

Sleep :

“Sore labor’s bath

Balm of hurt minds, good nature’s second course.

Chief nourisher at life’s feast.”

Eight to ten hours a day given to labor of body or of mind is quite as much as should usually be given; and then the seventh day must be given to rest.—*McSherry.*

Sleep is that golden chain that ties health and our bodies together.—*Thomas Tusser.*

Late to bed and early to rise

Weakens the stomach, the brain and the eyes.

Entertain hopes, mirth rather than joy, variety of delights rather than excess of them.—*Lord Bacon.*

Social cares and dissipations and accomplishments cannot be safely combined with full school duty to any great extent; one or the other must be contented.—*Dr. C. F. Folsom.*

Almost three-fourths of the causes of nervous exhaustion and nervous disorders generally lie in natural physical disabilities, in unwise methods of living, especially in breathing too little fresh air, in neglect of physical exercise, in not heeding early symptoms of disease, too often in the resort to the habitual use of stimulants and narcotics, including the excessive use of tea, coffee and tobacco, those curses of nervous people;—*Dr. C. F. Folsom.*

The whole tendency of modern life is to physical strain and brain worry, which are exaggerated by a resort to all sorts of artificial stimulants.—*Dr. C. F. Folsom.*

Lord Derby said: “It is not mental labor which hurts anybody, unless the excess is very great, but rather fretting and fidgetting over the prospect of labor to be gone through. * * * Next I would warn you that those students who think they have no time for bodily exercise will sooner or later have to find time for illness. When an opportunity of choice is given, morning work is generally better than night work; and if a man cannot get through his day’s labor, of whatever kind it be, without artificial support, it should be a serious consideration for him whether that kind of labor is fit for him at all.”

The body is the instrument of the mind. It is the executive of the thoughts.—*Schaible.*

There is nothing else which so taxes, tries and exhausts the life force as mental effort.—*Dr. Matthews.*

"It is *pace* that kills."

"Our national vice is excess."

Habitual overwork, or excessive intensity of life, tends to induce premature failure.—*Dr. McSherry*

Nothing more surely eats away and undermines the vital forces than worry and anxiety, however caused. There is a danger from overwork not to be forgotten; it is already being felt in a rapid increase of nervous diseases with their irresistible tendency to the use of narcotics and stimulants, and a ready susceptibility to malarial influences.—*T. T. Munger.*

Thought exhausts the nervous substances as surely as walking exhausts the muscles.—*Prof. Bain.*

It is not work but worry that kills the brain.—*S. Batty Tuke.*

It is a staying power you want more than brilliancy of mind.—*Dr. W. W. Godding.*

"Too often we are weak because it never enters into our thoughts that we might be strong if we would."

Exercise charity towards all; control your passions; govern your appetites; develop and manifest a sweet and peaceful spirit.—*Dr. J. M. Peebles.*

Vacation should include the gun, the rod, the excursion afoot, life out of doors, a different food, air, thought, always variety, always change. Recreation should not include mental labor similar to that of working hours.—*Congregationalist.*

Brain diseases are given as the second cause—in number—of deaths in the United States by the last census.

Twenty and five-tenths per cent. of the deaths in Massachusetts in 1885 were from brain diseases. Since 1860 the death rate from nervous and brain diseases has more than doubled.

The population of Chicago has increased five fold in sixteen years, while deaths from nervous diseases have increased sixteen fold.

The danger to our civilization to-day lies in the direction of nervous exhaustion.—*Dr. W. W. Godding.*

Professor Bain of Aberdeen (Scotland) University declares that there are the hardest heads and hardest workers in his University that there

are in Great Britain, and that four hours of steady mental labor is as much as is good for them,—*Dr. B. W. Richardson.*

It is worry, little fidgeting mental worries, that conduces more than mental work (not excessive) to shatter the nerves.—*Popular Science Monthly.*

A man who uses his brain continually and as much as it will bear for ten months every year, can do vastly better work the next year if he will let his brain lie fallow for two months, so far distant from his usual habits and his occupations that there is no incitement to intellectual work.—*Sir Henry Holland.*

The scholar may and often does cultivate the brain at the expense of the rest of the body, until he and his descendents suffer, and the family becomes extinct.—*Prof. J. M. Tyler.*

EYES.

The eyes need *frequent tepid bathing.*

Not used by artificial light in the morning. What *kind of artificial light*, and what its position. About *shades.* About *glasses.* The *position of book or paper*, and distance from it. *Position of body* in reading or study. About the *heat of the lamp.* *Direct sunlight.*

Riding in strong winds and *exposure to very cold currents of air.*

Near sight not a disease but a condition.

How *natural or artificial light* should illuminate the paper we read.

When an eye is *cut or injured.*

What *near sight* is, and how brought about.

Keep *friction and pressure* away from your eyes.

Secure plain and clear type in your books.

Dr. Hasket Derby says: "When you take your morning bath give your eyes a good washing out. When dressed, eat a cracker, drink a glass of water, take a five minute's walk in the open air, and then go to work, if there be ample daylight. Avoid all use of the eyes after a hasty toilet, or on an empty stomach."

Reading requires a greater degree of visual effort than copying, and copying a greater degree than simple writing. That which is true of

the organism as a whole is true also of its parts; and the eyes among others are best treated by an amount of systematic use which preserves the tone of their muscles and the regularity of their blood supply.—*E. B. Carter.*

Near sight is caused by change in the shape of the eyeball, generally accompanied by diseased conditions of the internal parts of the eyes, which tend to increase rapidly during the school years, and in extreme cases may lead to blindness; a strong tendency is also developed to transmit these changes from parent to offspring.—*Dr. C. H. Williams.*

In reading, the book should be held so that the surface of the page forms a right angle with a line drawn from it to the eye, and while reading it is best to avoid all stooping positions and to keep the head nearly erect.—*Dr. Williams.*

Among the Germans, the composing text, the bad type and paper which have often been used in the books and for younger children, have been one of the causes of the national myopia. In selecting books care should be taken that the paper is sufficiently thick and white, for white paper gives a better contrast with the black letter than any colored surface, and also reflects more light, thus making the page more easily legible.—*Dr. Williams.*

Rub your sore eye with your elbow.

Myopia is directly caused by three leading factors, school books, badly arranged light, and ill-constructed seats.—*Robert Farquharson.*

The book should be raised 20° for writing, and 40° for reading—*Brundenell Carter.*

Read with the back to the light.

Reading while riding is injurious to the eyes.

Tinted writing paper preferable to plain white, and especially in heavily calendered paper.

When light is painful to the eyes, smoked or light blue glasses may be used, but only so long as the cause is present.

As for your teeth, so for your eyes, get the best professional advice.

Very serious symptoms are produced upon the sense of vision by the constant or excessive use of tobacco.—*Rohé.*

PURUM TE IPSUM CONSERVA.

REPRODUCTIVE ORGANS.

Necessary knowledge about them.

What attention they need.

Perils of sensuous art and literature.

Don't lie abed awake.

The rottenness of venereal diseases.

Masturbation and venereal diseases take a progressive course.

Seminal emissions, expect them occasionally.

Be ready to meet temptation constantly.

Why sexual intercourse is injurious, and alluring.

Don't have nude pictures or statues in your room.

Providence seemed to have stamped this vice (fornication) with more than ordinary token of displeasure by rendering its votaries liable to that form of disease (syphilis) from which so few of them ultimately escape. * * * For I believe that no one is ever exposed to temptations which he cannot resist and overcome *if he will*.—*Prof. B. G. Wilder*.

A man should go into training for a conflict with his appetite, just as keenly as he does for the University Eight, the only difference being that the training will be more beneficial and more protracted.

Besides diet and exercise let him be fully employed; in fact let him have so many metaphorical irons in the fire that he will find it difficult to snatch ten minutes for private meditation; let neither his eye nor his ear be voluntarily open to anything that could possibly excite the passions. If he sees and hears accidentally what might have this tendency, let him at once resort to his dumb bells, or any other muscular precaution, till he is quite fatigued: whenever any sensual image occurs involuntarily to his mind, let him fly to the same resource, or else to the intellectual company of friends, till he feels sure of no return on his enemy's part.—*English Journal*.

"Why should God have bestowed on us the gifts of the flesh, if not that we may use them,"—*George Ebers*.

"Why comes temptation to any man, but to be met, mastered, and made to cringe beneath his feet."—*Robert Browning*.

It is easier to prevent bad habits than to break them.

"Keep innocence; be all a true man ought.

Let neither pleasure tempt, nor pain appall.

Who hath this, he hath all things having naught,

Who hath it not, hath nothing, having all."

—*Lewis Morris*.

"Lastly, I would fain add, let the sufferer from sexual causes make his affliction the subject of most earnest prayer, at any and all times, to the ear where no supplication is made in vain. Thus armed he may keep his assailant at bay, though I fear conquest is impossible and the struggle a most severe one."

If in trouble about the reproductive organs, don't go to a man who advertises to take care of them, but to an old physician.

You'll all be sorely tempted some time in life in the sexual direction, it may be often. Never be off your guard. But never by any means allow yourself to be put in the way of temptation. This is tempting Providence. Let the lewd woman alone; you can't help her nor she you.

The venereal is one of the rottenest of all diseases. The worst form of it is often contracted by a single connection with a strumpet. You never know the condition of a woman who prostitutes herself to you. A disease which you never can positively say is cured may appear after twenty years' sleep. Does not require a connection with an old character to get "bitten." It blights purity of affection for mother, sister or lover. The curse of God is stamped on illicit sexual intercourse.

"A man 70 years old, and a grandfather had an attack of a simple malady which did not yield to treatment. On investigation the physician found that 40 years previously he was attacked with gonorrhea and though it was presumably cured at the time, yet it unmistakably presented itself at this late period of his life, as a hindrance to the treatment of the present malady." However well he may feel he is the subject of a serious disease (gonorrhea) which may render his life miserable and even cause his death.—*Dr. H. M. Lyman*.

He that is master of himself will soon be master of others.

Passions are not to be extinguished, but they are to be kept in subjection.—*McSherry*.

Avoid whatever tends to lessen vitality.—*T. T. Munger*.

The dirtier a man is the more he talks about modesty.

Strong passions mean weak will.

He that ruleth his own spirit is greater than he that taketh a city.

Learn to say no to yourself as well as to others.

Late to bed and early to rise weakens the stomach, the brain and the eyes.

Let not anyone say that he cannot govern his passions, nor hinder them from breaking out and carrying him to action; for what he can do before a prince or a great man, he can do alone, or in the presence of God, if he will.

Genius is no excuse for immorality.

"He who wrongs his body has no monopoly of the consequences. Every sin against the body by one who is ever to become a parent is a sin against the race which postpones the day of its perfection, and so prolongs its period of sin and suffering.—*Dr. Josiah Strong.*

The man of the future will probably be a man of strong appetites, for he will be healthy: he will be prudent because wise: but he will hold his appetites well in leash.—*Prof. J. M. Tyler.*

WHAT THE BIBLE SAYS ABOUT UNCHASTITY.

For the lips of a strange woman drop as a honeycomb, and her mouth is smother than oil. But her end is bitter as wormwood, sharp as a two-edged sword. Her feet go down to death, her steps take hold on hell. Pursue thy way far from her and come not nigh the door of her house; lest thou give thy honor unto others and thy years unto the cruel, and thou mourn at the last when thy flesh and thy body are consumed, and say how have I hated instruction and despised reproof. To keep thee from the evil woman, from the flattery of the tongue of a strange woman. Lust not after her beauty in thine heart, neither let her take thee with her eyelids. For by means of a whorish woman, a man is brought to a piece of bread; and the adulteress will hunt for the precious life. Can one go upon hot coals and his feet not be burned?

With much fair speech she causeth him to yield; with the flattering of her lips she forceth him. He goeth after her straightway as an ox goeth to the slaughter, or as a fool to the correction of the stocks, till a dart strikes through his liver; as a bird hasteth to the snare, and knoweth not that it is for his life. She has cast down many wounded; yea

many strong men have been slain by her ; her house is the way to hell, going down to the chambers of death. Stolen waters are sweet and bread eaten in secret is pleasant. But he knoweth not that the dead are there and that her guests are in the depths of hell. Her house inclineth unto death, and her paths unto the dead. None that go unto her return again, neither take they hold of the paths of life. He that committeth fornication sinneth against his own body. The mouth of a strange woman is a deep pit : he that is abhorred of the Lord shall fall therein.

I find more bitter than death the woman whose heart is snares and nets.

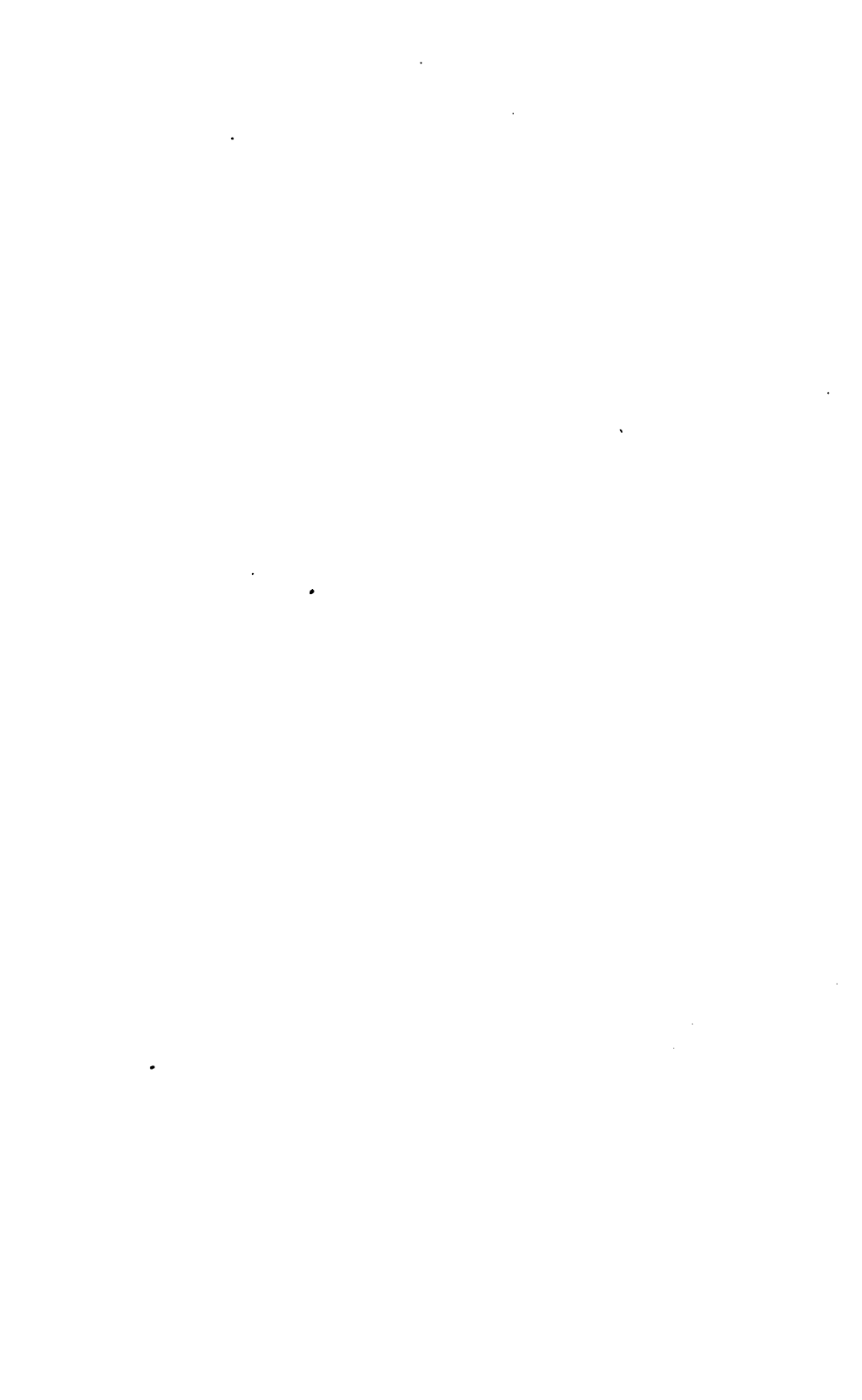
The works of the flesh are these : adultery, fornication, uncleanness They that do such things shall not inherit the kingdom of God.

Whoremongers and adulterers God will judge.

Give not thy strength unto woman, nor thy ways to that which destroyeth kings.

Be not deceived ; neither fornicators, nor idolators, nor adulterers nor effeminate, nor abusers of themselves with mankind, shall inherit the kingdom of God.

Marriage is honorable in all, and the bed undefiled, but whoremongers and adulterers God will judge.



UNIV. OF MICH.
FEB 23 1907

CHARITY FUND
OF
AMHERST COLLEGE.

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CHARITY FUND
OF
AMHERST COLLEGE.

THE
CONSTITUTION
AND
SYSTEM OF BY-LAWS
OF THE
CHARITY FUND
OF
AMHERST COLLEGE,
WITH
AN HISTORICAL APPENDIX.

AMHERST, MASS.
1881.

COMPILED and published in compliance with a vote of the
Board of Overseers.

CHRISTOPHER CUSHING,
ROWLAND AYRES,
JOHN M. GREENE,

Committee.

SEPT. 1, 1881.

A
CONSTITUTION
AND
SYSTEM OF BY-LAWS

FOR THE RAISING AND MANAGING A PERMANENT CHARITABLE
FUND, AS THE BASIS OF AN INSTITUTION IN AMHERST, IN
THE COUNTY OF HAMPSHIRE, FOR THE CLASSICAL EDUCATION
OF INDIGENT YOUNG MEN OF PIETY AND TALENTS, FOR THE
CHRISTIAN MINISTRY.

TAKING into consideration the deplorable condition of a large portion of our race, who are enveloped in the most profound ignorance, cruel superstition, and gross idolatry, and many of them in a savage state without a written language: together with vast multitudes in Christian countries, of which our own affords a lamentable specimen, who are dispersed over extensive territories, as sheep without a shepherd;

Impressed with the most fervent commiseration for our destitute brethren, and urged by the command of our divine Saviour to preach the gospel to every creature: we have resolved to consecrate to the Author of all good, for the honor of His name, and the benefit of our race, a portion of the treasure or inheritance which He has been pleased to intrust to our stewardship, in the firm belief that "it is more blessed to give than to receive."

Under the conviction that the education of pious young men of the first talents, in community, is the most sure method of relieving our brethren, by civilizing and evangelizing the world; and that a Classical Institution judiciously located, and richly endowed with a large and increasing charitable fund, in co-operation with theological seminaries and education societies, will be the most eligible way of effecting it:

Therefore, We, the undersigned, have solemnly, deliberately, and prayerfully made, constituted, and ratified, and by these presents and for the foregoing weighty considerations do make, constitute, and ratify the following Constitution and system of By-Laws, together with the preceding preamble, as the basis of such a fund, and for the raising and managing of the same:—

ARTICLE I. In contemplating the felicitous state of society which is predicted in the Scriptures of truth, and the rapid approach of such a state, which the auspices of the present day clearly indicate; and desiring to add our feeble efforts to the various exertions of the Christian community for effecting so glorious an event: we have associated together for the express purpose of founding an Institution upon the genuine principles of *charity* and *benevolence*, for the instruction of youth in all the branches of *literature* and *science*, usually taught in colleges; to be located in the town of Amherst, in the County of Hampshire, and incorporated with the Academy in that place, and with Williams College also, should it continue to be thought expedient to remove that seminary to said County of Hampshire, and to locate it in the town of Amherst, and to be called

ART. 2. In order to effect the benevolent object aforesaid, we whose names are hereunto subscribed, severally and solemnly promise to pay to the Trustees of Amherst Academy for the time being, or to their successors in office, the sums annexed to our respective names, for the purpose of raising a permanent fund of the amount of at least fifty thousand dollars, as the *basis* of a fund for the proposed Institution, the interest of which to be appropriated, in manner hereinafter provided, to the increasing said fund, and for the *classical* or *academic* and *collegiate* education of indigent young men of promising talents and hopeful piety, who may desire such an education, with the sole view to the Christian ministry, and whose talents, piety, and assiduity, upon a suitable probation, shall entitle them to the patronage and assistance of the Institution.

Provided, nevertheless, and with a view to remove all doubt relative to the success of said object, that in case the sums subscribed to this instrument, in the course of one year from

the date hereof, shall not amount to the full sum of fifty thousand dollars, then the whole, or any part thereof, shall be void according to the will of any subscriber or subscribers, he or they giving to the Trustees aforesaid, three months' notice of his or their desire of such avoidance and his or their obligation or obligations shall be returned, or his or their money, as the case may be, shall be refunded: *provided, however*, that the said notice be given as aforesaid, within three months next after the expiration of the said one year from date.

ART. 3. The aforesaid sum of fifty thousand dollars, together with any other sums that may be subscribed to this instrument, or any sums which may be added to it, by gift, grant, or bequest, not otherwise particularly appropriated by the donor, shall be denominated the Charitable Fund of the *Classical Institution* at Amherst, and is consecrated to the education of indigent young men of piety and talents as aforesaid, for the Christian ministry, in said Institution. The interest and other avails of said fund shall be forever appropriated as follows, viz.: five sixths thereof to the purposes aforesaid, namely, the classical education of indigent pious young men; the other sixth part shall be added to the principal as it shall accrue, for its perpetual increase.

The principal of the fund shall be sacred and intangible, not subject to be diminished by any exigency, the act of God excepted, but shall be perpetually augmenting, by donations, subscriptions, grants, legacies, and bequests, and by the addition of one-sixth part of the interest and other avails, as aforesaid.

ART. 4. The property of said fund, unless it be in productive real estate, shall as soon as convenient be vested in the funds of this Commonwealth, in the funds of the United States, or in some other safe public fund; or be secured by real estate: and retained in as productive a situation as may be, consistently with perfect safety.

ART. 5. Until the aforesaid contemplated Classical Institution, of which the said fund is to be the basis or main pillar, is formed, established, and incorporated a body politic and organized for operation, the property of said fund and the management thereof shall be invested in the Board of Trustees of

Amherst Academy ; so, however, as to be in perfect conformity to the provisions of this Constitution, and not repugnant to the Constitution of this Commonwealth. At the accomplishment of which, meaning the establishment, incorporation, and organization of said Institution, as aforesaid, the Trustees of said Academy shall, without loss of time, transfer, set off, acquit or convey to, give possession of, and pay over to the Board of Trustees of said Institution, the whole of the property of said fund, whether real, personal, or mixed, in possession or reversion, together with the titles and evidences of the same, with the obligations, records, files, *et cetera* ; in whom and their successors in office, the property of said fund and the management and appropriation thereof, according to the provisions of this Constitution and system of By-Laws, is hereby and shall be forever vested.

Whatever, in the safe keeping, skilful management, and faithful appropriation of the aforesaid fund, is made binding on one of the said Boards of Trustees in whom the same is or shall be vested in the one case, is and shall be equally binding on the other.

ART. 6. For the greater safety, and more prompt and easy management of so important a concern, there shall be appointed, as is hereinafter provided, a Board of Overseers consisting of at least seven in number, a skilful Financier, and an able Auditor.

ART. 7. It shall be the duty of the Trustees of said Academy, or of said Institution, as the case may be, to appoint, either from their own board — their Treasurer excepted, who shall be ineligible * — or from the public at large, a skilful Financier, who shall be sworn to the faithful discharge of the duties of his office, and under sufficient bonds to said board for the security of his trust ; and subject to be removed at their discretion whenever the interest of the Institution shall require it.

It shall be the duty of the said Trustees also, to examine all candidates for the charities of the Institution, to put them upon such probation as shall be deemed sufficient to determine their qualifications for admission as beneficiaries, and to apply the avails of the fund, either in whole or in part, to the assistance of those who may upon the issue of such examination or

* Altered in 1826, see p. 29.

probation be admitted, or who may be admitted from similar institutions, or from education societies ; to keep a correct record of the amount of said fund, the situation and estimated value of each part and parcel thereof which may be in real estate, the rate of rent at which each may be leased, and the time when due ; if in other estate, the places of its deposit, the security upon which its safety depends, and the average rate per centum of interest which it may produce ; the progressive increase of the whole fund, with the ways and means by which it is effected ; the amount received into their treasury in interest, rent, and otherwise ; and of their disbursements ; together with a detail of all their proceedings, a list of all vouchers, and a summary of the accounts, vouchers, and reports of the Financier. To preserve on file all papers that may directly or indirectly relate to the said fund, or to the management thereof ; and to make a detailed report of the same annually, with a digest of their plan of operation for the ensuing year to the Board of Overseers at their annual visitation ; exhibiting at the same time, and at other times also, if requested, to the said board, or to the said Auditor, their books of records, their files, the books and files of the Financier, and any other evidence it may be in their power to furnish. It shall be the duty of the said Trustees likewise, to keep an annual account current of all the losses and gains, receipts and expenditures of said fund, to which shall be brought up all unliquidated and unsettled accounts, arrearages, or surplusages of former years ; and ready to be submitted to said Auditor for his inspection, at least five days next preceding the annual commencement, or meeting of said Board of Trustees, who is authorized to call for all necessary vouchers to the same, whether written or unwritten. It shall be the duty of the said Trustees also, annually, immediately preceding their annual meeting, to cause a manuscript copy of their records for the then past year, and also a copy of their files for the same period, to be taken and attested by their Secretary, and ready to be delivered to the said Board of Overseers for safe keeping, as a security against their loss by fire or any other casualty.

ART. 8. It shall be the duty of the Financier to receive all moneys and other personal property from the subscribers,

promisors, obligors, donors, and executors or trustees of legators to said fund, and without loss of time to place the same in the most productive situation, according to the provisions in the fourth article of this Constitution ; and to receive possession of, and to farm let any real estate which may have been, or which at any time hereafter may be presented to said fund, by gift, grant, or bequest, or which may in any other way become the property of said fund, and to purchase insurance of any property of said fund which may be in danger from fire or from any other unforeseen occurrence. It shall be his duty also, diligently and skilfully to manage the prudentials of the said fund, carefully guard against contingent losses, and lose no time in shifting or securing the property when in danger ; to receive the interest and rents of the fund as they become due, and without delay place one-sixth part of the amount in some safe and productive department of the fund, and deposit the other five sixths in the treasury of said Academy or Institution, as the case may be, and take triplicate receipts for the same, of the Treasurer thereof : one to keep for his own security, one to deposit with the Secretary of said Board of Trustees, and the other with the said Auditor.

It shall be his duty likewise to keep an accurate account of the whole fund, its original amount and progressive increase ; of its amount at the end of each year successively, computed immediately preceding the annual meeting ; of the amount of each department thereof, where and how secured ; the rate per centum of interest at which each may lie, and the time when due ; the rate of rent at which each part, parcel, and tenement is leased, and the time when due ; the amount of interest and rent added to the principal of the fund, and the amount of money deposited in the treasury of said Academy or Institution ; and to report the whole to said Board of Trustees, with such remarks and suggestions as he may choose to submit relative to any particular system of finance he may deem necessary to be pursued in future : and to lodge the same, together with his account current, with the Treasurer of said board, at least seven days previously to the annual meeting of said board, that the necessary adjustments may be made, the account current and report of said board completed, the requisite

vouchers arranged, and ready to be submitted to the inspection of the said Auditor of accounts and Board of Overseers, at the respective times appointed for that purpose. It shall be the duty of the said Financier also to be present at all meetings of the said Auditor and Board of Overseers, for the examination of the accounts and state of the fund, and to present his books, files, and vouchers, for their inspection, and to offer for their consideration any information relative thereto, which it may be in his power to afford. It shall be his duty likewise, in case of his resignation or being succeeded in office, to deliver to the said Board of Trustees, or on their order, to his successor in office, the whole of the property of said fund, with all the titles and evidences of the same, together with all his books, papers, and files, that may directly or indirectly relate to the fund or the management thereof; and in case of his death, his Executor or Administrator shall do the same.

ART. 9. The Financier shall be paid from the avails of the said fund a reasonable sum for his services and responsibility; and all other necessary expenses that may accrue in the management and appropriation of the fund, or the avails thereof, shall be paid in like manner.

ART. 10. The Board of Overseers, who are hereby constituted the guardians of said fund, shall be appointed and perpetuated in manner following, viz.: Four shall be appointed by the four highest subscribers to the aforesaid fifty thousand dollar fund, each shall appoint one; the other three shall be elected by a majority of votes of the remaining subscribers to said fund, who may assemble for that purpose. Said elections to be made as soon as convenient after the filling of said subscription. The said board shall perpetuate their existence as such, by filling their own vacancies in the following manner, viz.: No seat shall be suffered to be vacant for more than six months. Vacancies occasioned by death, resignation, removal, incapacity by age or otherwise, of which incapacity the said board shall always be competent to determine, shall be filled by a majority of votes of the members present at any annual or special meeting, regularly notified for that or other purposes. Should the said board, from neglect, or by any fortuitous circumstances whatever, be reduced to two members, or even to one,

they or he, as the case may be, shall be competent to fill the vacancies to the number sufficient to constitute a quorum, and the said board thus filled shall elect the remainder. And in case the said board shall at any future period become extinct, the Governor and Council of this Commonwealth are hereby authorized and requested to appoint a new board, with all the rights, powers, and immunities of the former one. In all meetings of the said Board of Overseers, for the transaction of business, except in the matter of filling vacancies, four members shall be necessary to constitute a quorum. And to prevent the sudden disorganization of said board at any time, so as to interrupt business, all resignations shall be made in writing to the board when in session, and if convenient, handed in by the member himself, that the vacancy may be immediately filled; but the resignation shall not be accepted, so as to disqualify the member so offering his resignation from acting with the board, in all matters pending before them, till another shall be elected in his stead, and has signified his acceptance.

ART. 11. It shall be the duty of the Board of Overseers, as the guardians of said fund, to appoint annually, or to appoint and continue in office during their pleasure, either from their own body or from community at large, an able Auditor of accounts, who shall be sworn to the faithful and impartial discharge of the duties of his office; and to certify to said Board of Trustees every such appointment.

It shall be their duty also, to visit the said Institution at its annual commencement, or the Board of Trustees in whom the property and management of said fund are vested, at their annual meeting in each year successively forever: to receive and diligently and impartially examine their report, which should always contain a correct statement of the nature and amount of the original fund, the evidences of the property, how situated, where deposited, and how secured; its progressive increase from year to year, and the ways and means by which effected, with the aggregate amount at the date of each annual report; the amount of interest and rent, the avails of the fund, or of donations and subscriptions made in aid of said fund, received into their treasury, with the amount of their disburse-

ments ; together with a list of the beneficiaries receiving support in whole or in part from said fund, and the amount of assistance afforded to each : to receive also, and examine the report of said Auditor, and to inspect the records, files, and vouchers of the Trustees and Financier aforesaid. It shall be their duty likewise, scrupulously and impartially to examine and compare all the documents, carefully attend to the oral representations of the officers and Trustees aforesaid explanatory thereof, and in view of all the facts to decide whether the said fund has been skilfully managed, and whether the avails thereof have been sacredly and ecomomically applied according to the will of the donors, as is provided in this Constitution and system of By-Laws ; and whether the financial system pursued, or proposed to be pursued in future, is consistent with the spirit of this Instrument. The sacred nature of the trust reposed in the said Board of Overseers, as the representatives of the rights of the dead, as well as the living, urges upon them the imperious duty of investigating every subject relative to their important trust, so as to enable them to approve or disapprove of the management of any part of the concern ; to point out any errors they may have observed, or any improvements which they conceive may be made ; to detect any violation of rights, breach of trust, or abuse of powers, any perversion of the fund or misappropriation of the avails thereof, and to suggest the same to the said Trustees with a view to produce a reform. Should the circumstances be such in any case as to force a conviction that the Constitution and laws had been violated, and the sacred deposit perverted ; should the Trustees aforesaid, to whose fidelity it had been intrusted, disavow the facts, and persist in the vindication of the purity of their motives, and the wisdom of their measures ; and should the reasons offered in justification thereof be insufficient to satisfy the said Board of Overseers, and to remove those impressions : they, the said Board of Overseers, shall enter their protest in writing, specifying the grounds of their conviction as aforesaid ; which, together with the reasons offered by the said Board of Trustees in their justification, shall be entered on the records of both boards. And the question shall be submitted to the Honorable Justices of

the Supreme Judicial Court of this Commonwealth, whose decision shall be final; and shall be entered on the records of both of the said boards. Any similar or other questions of rights, powers, or amenability shall be submitted in the same way. It shall be the duty of the said Board of Overseers to keep a fair and correct record of all their proceedings, relative to the execution of their important trust; to record or preserve on file the annual reports of the said Boards of Trustees, and the reports of the said Auditor; to receive and safely preserve the manuscript copies of the records, and the copies of the files of the Board of Trustees, which shall be annually furnished and attested by the Secretary thereof, and delivered at the annual visitation, that the whole of the records of the Institution may be safely preserved in the archives of both boards. And in case of the loss or destruction of the records and files of either of the said boards, by fire or otherwise, the Secretary or recording officer of the other shall lose no time in furnishing attested copies of the whole to supply the deficiency.

It shall be the duty of the said Board of Overseers, annually or whenever in their opinion the interest of the Institution or the public good require it, to publish a correct report of the state of said fund, its progressive increase, growing importance, and extensive utility.

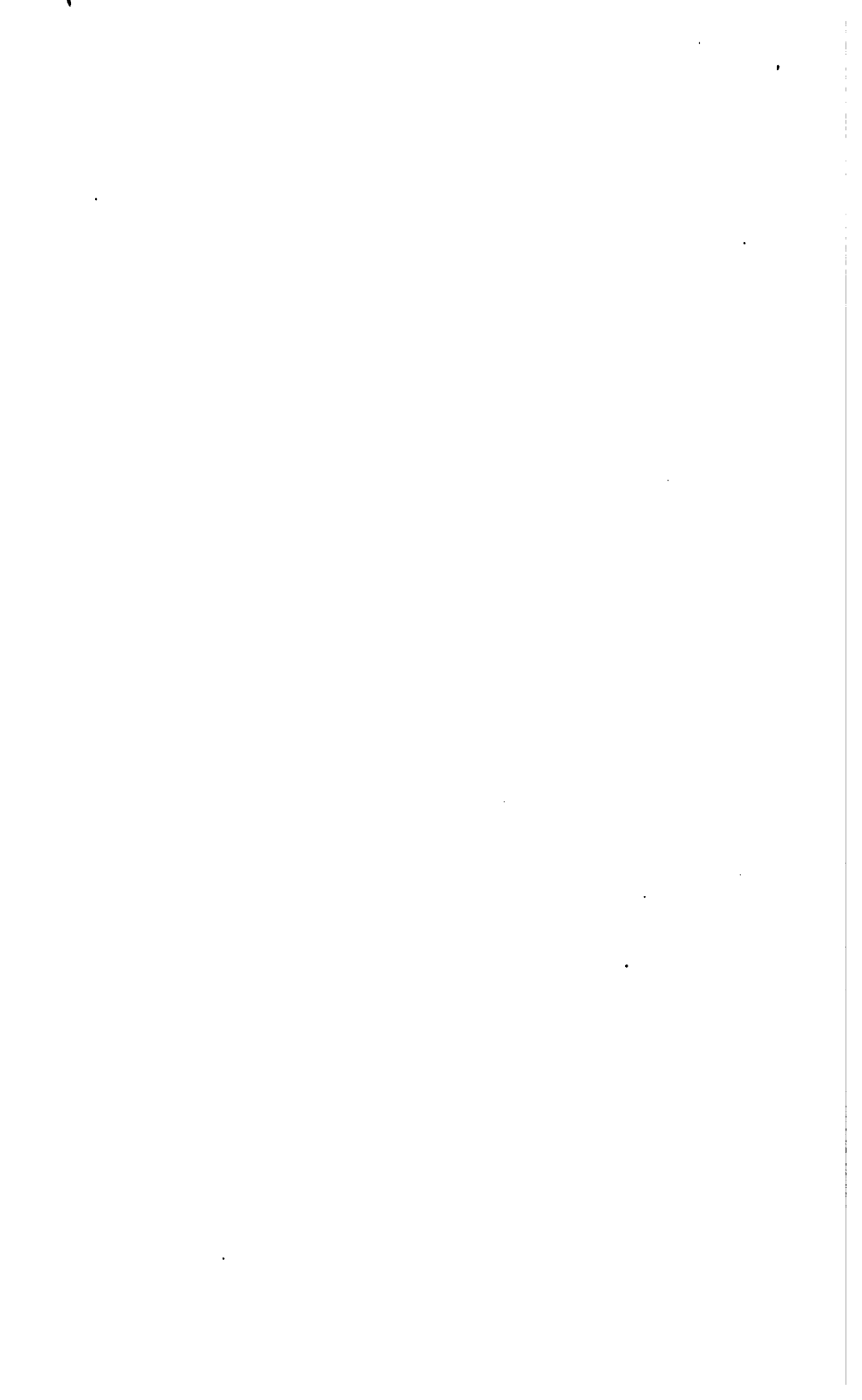
ART. 12. It shall be the duty of said Auditor to attend at said Institution a sufficient length of time within the five days next preceding the annual commencement, or annual meeting of said Board of Trustees, to receive and audit all the accounts of said board relative to the management of said fund, examining all books, files, vouchers, and oral testimony which it may be in their power to afford illustrative of the same; and to make a detailed report of the state in which he finds them, to the said Board of Overseers at their annual visitation. It shall be his duty also, to attend to the duties of his office at other times, in the interval, if the exigencies of the Institution or fund shall require it. He shall also keep a correct record of all his proceedings from year to year; and in case of his resignation, or being succeeded in office, shall lodge the same with the said Board of Overseers.

ART. 13. It being the design of the founders of this establishment, that its benefits should be handed down inviolate to all succeeding generations, and considering the inadequacy of human forethought to provide for every exigence that may occur in the course of long experience, we, the undersigned, agree that this Constitution and system of By-Laws may be altered or amended by the Board of Trustees of said Institution, and the Board of Overseers of said fund, so, however, as not to deviate from the original object of *civilizing* and *evangelizing* the world, by the *classical education* of indigent young men of piety and talents; but it shall not be altered or amended except from the most weighty considerations, and by the concurrence of both the said boards, each holding a negative upon the other, nor without the majority of two thirds of the members of the said Board of Trustees, and five sevenths of the members of the said Board of Overseers.

A proposition for amendment may originate in either of said boards, but it shall not be proposed to the other till it has been fairly and deliberately discussed where it originated, and passed by the majority assigned as above to the said board. It shall then be sent to the other board for concurrence, where it shall undergo a like discussion, and if concurred in by the majority assigned also to that board, it shall become a part of this Constitution, otherwise not.

ART. 14. In order to prevent the loss or destruction of this Constitution, by any wicked design, by fire, or by the ravages of time, it shall be the duty of the Trustees of said Institution, as soon as the aforesaid sum of fifty thousand dollars shall be hereunto subscribed, to cause triplicate copies of the same, together with the names of the subscribers and the sum subscribed annexed to each name, to be taken, fairly written on vellum, one of which to be preserved in the archives of said Institution, one in the archives of the said Board of Overseers, and the other in the archives of this Commonwealth. And in case of the loss or destruction of either of said copies, its deficiency shall be immediately supplied by an attested copy from one of the others.

MAY 23, 1818.



APPENDIX.

NAMES, RESIDENCE, AND AMOUNT OF THE ORIGINAL SUBSCRIPTION TO THE CHARITY FUND OF AMHERST COLLEGE,

SUBSCRIBED between the twenty-third day of May, 1818, and the twelfth day of May, 1819, as arranged by Rufus Graves, Esq., Secretary and Agent of Amherst Academy, and laid before a Committee of the Legislature, Oct. 4, 1824.

NAMES.	RESIDENCE.	AMOUNT.
Elijah Arms	Deerfield	\$400
John Avery	Conway	100
Benjamin Adams	Hopkinton	40
Rev. Samuel Austin	Burlington, Vt.	1,000
Amos Allen	Shelburne	40
Calvin Ammidown	Southbridge	150
Elisha Billings	Conway	300
Mary Billings	Conway	100
Henry Billings	Conway	50
Williams Billings	Conway	150
Charles Billings	Conway	200
Israel Billings	Hatfield	150
Rhodolphus Bardwell	Montague	100
Moses Bardwell	Montague	50
Sarah Bardwell, his wife	Montague	50
Sarah Bardwell	Northfield	10
Phillip Blake	Franklin	200
Robert Blake	Wrentham	100
Samuel Baker	Foxboro'	50
Daniel Babcock	Attleboro'	25
Rev. Winthrop Bailey	Pelham	100
Thomas Bucklin	Hopkinton	25
Huldah Bucklin	Holliston	25
Rufus Baker	Hawley	100
Enos Baker	Amherst	100
Elijah Boltwood	Amherst	200
William Boltwood	Amherst	100
Lucius Boltwood	Amherst	100
Simeon Ballard	Sunderland	50
<i>Amount carried forward</i>		<i>\$4,065</i>

NAMES.	RESIDENCE.	AMOUNT.
<i>Amount brought forward</i>		\$4.065
Theodore Bridgman	Belchertown	50
Dolly Bancroft	Warwick	8
Cephas Blodgett	Amherst	100
Moses Bond	North Brookfield	300
Thomas Bond, Jr.	Brookfield	150
Aaron Bliss	Brimfield	100
Caleb Burband	Millbury	100
Joseph Bowman	New Braintree	200
Joseph Blodgett	Greenwich	100
David Burt	Longmeadow	100
Calvin Burt	Longmeadow	100
Gad Bliss	Longmeadow	100
Gideon Burt	Longmeadow	50
Gaius Bliss	Longmeadow	20
William Ballard	Charlemont	50
Josiah Bardwell	South Hadley	200
Benjamin Brainard	Gill	100
David Barnard	Shelburne	10
Abner Cooley	Deerfield	200
Oliver Cooley	Deerfield	200
Rev. Josiah W. Cannon	Gill	100
Thomas Clark	Sunderland	50
Charles Cooley	Sunderland	50
Ariel Cooley	South Hadley	500
Rev. John Crane	Northbridge	100
Noah Claffin, Jr.	Attleboro'	25
Joseph Cushman	Attleboro'	20
Nathaniel Cutler	Medway	25
Daniel Chamberlain	Brookfield	1,000
Seth Clark	Conway	75
Jonathan Cows	Amherst	100
Joseph Cows	Amherst	100
Silas Cows	Hadley	100
Rufus Cows	Amherst, land in Maine	3,000
Joshua Clark	Granby	100
Jutham Clark	Granby	50
Elisha Clapp	Deerfield	100
Elihu Clary	Deerfield	50
Jedediah Clark	Deerfield	100
Samuel W. Chapin	Barnardston	25
Betsey Cutter	Medway	5
Joseph Carew	Springfield	100
Jesse Carpenter	Attleboro'	50
Samuel Clark	Shutesbury	100
Rev. Daniel A. Clark	Amherst	100
Ebenezer Clark	Conway	50
Rev. Joshua Crosby	Enfield	100
Ebenezer Childs	Shelburne	100
Obadiah Dickinson	Heath	25
Margarett Dickinson	Holliston	25
Irene Dickinson	Holliston	25
Lucinda Dickinson	Amherst	100
Thankful Dickinson	Amherst	100
Eli Dickinson	Granby	50
Job Dickinson	Granby	50
Samuel F. Dickinson	Amherst	1,005
Elijah Dwight	Amherst	200
Elijah Dickinson	Amherst, land	600
Phillip Davis	Greenwich	50
<i>Amount carried forward</i>		\$14,808

NAMES.	RESIDENCE.	AMOUNT.
<i>Amount brought forward</i>		<i>\$14,808</i>
Samuel Druce	Wrentham	50
James Dickinson	Shelburne	100
Joseph Estabrook	Amherst	1,005
Joseph Emerson	Heath	25
Rev. John Emerson	Conway	50
Rev. Nathaniel Emmons	Franklin	50
Mary Everett	Attleboro	25
Aaron Eames	Holliston	50
Aaron Eames, 2d	Holliston	50
John Eastman	Amherst	400
Jonathan Eastman	Amherst	100
Joseph Eastman	Granby	50
William Eastman	Granby	100
Justin Ely	West Springfield	100
Elijah Field	Hawley	500
Rev. Joseph Field	Charlemont	200
Silas Field	Leverett	50
Isaac Fiske	Holden	50
Caleb Fisher	Franklin	25
Asa Fisher	Franklin	50
Rev. Elisha Fiske	Wrentham	25
Joseph Fairbanks	Billingham	50
Timothy Fiske	Holliston	50
Abel Fiske	Hopkinton	100
Lucius Field	Leverett	50
Alpheus Field	Leverett	50
Orlando Field	Leverett	50
John Fuller	Greenwich	50
Nathaniel Fuller	Greenwich	100
Alexander Field	Longmeadow	75
Rev. John Fiske	New Braintree	100
Clarissa Fales	Wrentham	10
Daniel Fiske	Shelburne	100
Erastus Graves	Sunderland	500
Rhoda Graves, his wife	Sunderland	500
Benjamin Graves	Sunderland	200
James Gould	Gill	100
Job Goodale	Bernardston	200
Lydia Goodale, his wife	Bernardston	50
Josiah Gleason	New Braintree	100
Rev. Joseph Goffe	Millbury	100
Asahel Gunn	Montague	50
Submit Gunn, his wife	Montague	50
Aaron Gould	Ware	100
Horatio Graves	Sunderland	50
Rev. Jonathan Grout	Hawley	100
Seth Howland	Gill	100
Peter Hunt	Heath	50
John Hastings	Heath	25
Elisha Hubbard	Sunderland	50
Rufus Hubbard	Sunderland	50
Rufus Hastings	Bernardston	50
Levi Hawes	Franklin	50
Benjamin Hawes	Wrentham	50
Rev. Nathan Holman	Attleboro'	50
Richard Hunt	Attleboro'	25
Rev. Nathaniel Howe	Hopkinton	50
Sylvester Hovey	Conway	150
Simeon Hubbard	Brimfield	100
<i>Amount carried forward</i>		<i>\$21,548</i>

Names.	Residence.	Amount.
<i>Amount brought forward</i>		\$21,548
Jared Hawks, Jr.	Goshen	200
Rev. Jacob Ide	Medway	50
Martha Ide	Seekonk	20
Ichabod Ide	Attleboro'	10
Nathaniel Ide	Attleboro'	10
Elias Ingram	Attleboro'	10
Rev. Samuel Judson	Uxbridge	100
Nathaniel Johnson	Holliston	25
Aaron Johnson	Greenwich	100
Samuel Joslin	New Braintree	50
John Jacobs	Millbury	50
Joseph Keith	Enfield	100
Remember Kemp	Seekonk, R. I.	50
William Kellogg	Amherst	100
Joseph Kellogg	Amherst	50
Martin Kellogg	Amherst	100
Edmund Longley	Hawley	100
Roger Leavitt	Heath	200
Edmund Longley, Jr.	Heath	100
Joseph Lyman	Northfield	25
Elizabeth Lyman, his wife	Northfield	25
Shepard Leach	Easton	
Howard Lathrop	Easton	100
Asaph Leland	Holliston	50
Anna Leland	Holliston	25
John Leland, Jr.	Amherst	150
Asa Lincoln	Holliston	20
Richard Lewis	Ware	100
Laban Marcy	Greenwich	500
Rev. Moses Miller	Heath	75
Bethiah Miller, his wife	Heath	10
Hugh Maxwell	Heath	100
Mary Montague	Montague	100
Hezekiah Mattoon	Northfield	25
Penelope Mattoon, his wife	Northfield	25
Cornelius Metcalf	Foxboro'	50
Jonathan Metcalf	Franklin	50
Gideon Moody	Granby	100
Calvin Morse	Ware	50
Azor Moody	Granby	300
Jason Mixter	Hardwick	200
Calvin Merrill & Son	Amherst	300
Oliver Mason, Jr.	Southbridge	50
Daniel Morse	Southbridge	50
Gerusha Morse, his wife	Southbridge	10
Lason Morse	Southbridge	25
David Mack, Jr.	Middlefield	333
Zebina Newcomb	Bernardston	50
John Northam	Greenwich	100
John Osborn, Jr.	Ware	50
Joel Parsons	Conway	500
Thomas Powers	Greenwich	100
Titus Pomroy	South Hadley	200
Sybel Parmenter	Bernardston	50
Isaac Pratt	Foxboro'	50
Elizabeth Prentis	Holliston	50
Rev. David Parsons, D. D.	Amherst	600
John Payne	Granby	100
Benjamin Paige	Ware	100
<i>Amount carried forward</i>		\$27,771

NAME.	RESIDENCE.	AMOUNT.
<i>Amount brought forward</i>		<i>\$27,771</i>
Thomas Parsons	Amherst	100
Joshua Pomroy	Greenwich	100
Rev. Theophilus Packard	Shelburne	100
Rev. Eliakim Phelps	Brookfield	100
Seth Porter		
Seth Porter, Jr. }	Cummington	600
Daniel Rugg	Heath	25
Spencer Root	Montague	100
Stephen Rhoads	Foxboro'	50
Luther Root	Sunderland	50
Elihu Rowe	Sunderland	100
Nathaniel Smith	Sunderland	1,000
Thankful Smith, his wife	Sunderland	700
Thomas Sanderson	Whately	200
Timothy Stoughton	Gill	100
Moses Smith	Hawley	100
Consider Scott	Charlemont	25
Prince Snow	Bernardston	33
Thomas Snow	Bernardston	50
Selah Severance	Shelburne	25
Benjamin Shepard	Wrentham	75
Benjamin Shepard, Jr.	Wrentham	50
Rev. Luther Sheldon	Easton	30
Sarah Sheldon, his wife	Easton	20
Ebenezer Stebbins, Jr.	Deerfield	25
Hezekiah W. Strong	Amherst	100
Aaron Smith	Granby	50
George Sumner	Southbridge	40
John Stebbins	Spencer	50
Rev. Micah Stone	Brookfield	100
Rev. Thomas Snell	North Brookfield	100
Joel Smith	Amherst	150
Oliver Smith	Hadley	1,005
Solomon Strong	Leominster	200
Benjamin Stebbins	Springfield	100
Orra Sheldon	Bernardston	25
William Steadman	Charlton	100
Salem Town, Jr.	Charlton	500
Israel E. Trask	Brimfield	500
Rev. James Taylor	Sunderland	100
Samuel Taylor	Buckland	100
Horace W. Taft	Sunderland	100
Peter Thacher	Attleboro'	50
Hannah Tyler	Attleboro'	20
Samuel Tyler	Attleboro'	25
Jonathan Fay	Sherburne	50
Orin Trow	Hardwick	100
Kingsley Underwood	Enfield	50
David White	Heath	50
Jarib White	Amherst	150
Samuel Ware	Conway	300
Samuel Warren	Conway	400
Joseph Williams	Greenwich	100
John Warner	Greenwich	100
Warren Wing	Greenwich	100
William Walker	Hardwick	100
Ephraim Williams	Ashfield	200
Eli Wheelock	Sturbridge	100
Nathan Woodward	Franklin	50
<i>Amount carried forward</i>		<i>\$36,794</i>

NAMES.	RESIDENCE.	AMOUNT.
<i>Amount brought forward</i>		\$36,794
Hannah Woodward	Franklin	40
Elizabeth Woodward	Franklin	15
Gideon Warner	Sunderland	25
Peggy Walker	Medway	20
Rev. Joseph Wheaton	Holliston	50
Rev. William Wyson	Hardwick	100
James Wight	Holliston	50
Rev. Edward Whipple	Charlton	100
Rev. Thomas Williams	Foxboro'	50
Rev. David Parsons		
Samuel F. Dickinson		
Jarib White		
Elijah Boltwood		
Hezekiah W. Strong	. . . . Amherst	15,000
Enos Baker		
John Leland, Jr.		
Calvin Merrill		
Joseph Church, Jr.		
Total		\$52,244

GUARANTY BOND

Signed by the above nine citizens of Amherst, binding themselves jointly and severally to the payment of the above sum of fifteen thousand dollars in order to make up the full amount of fifty thousand dollars.

Know all Men by these Presents, that we, David Parsons, clerk, Jarib White, gentleman, Calvin Merrill, gentleman, Enos Baker, gentleman, John Leland, Jun., Esq., Samuel Fowler Dickinson, Esq., Elijah Boltwood, innholder, Hezekiah Wright Strong, Esq., and Joseph Church, Jun., husbandman —

Are holden and stand firmly bound and obliged unto the Trustees of Amherst Academy in the full sum of fifteen thousand dollars, to be paid to the said Trustees, their successors and assigns, to which payment well and truly to be made, we jointly and severally bind ourselves, our heirs, assigns, executors and administrators, firmly by these presents, sealed with our seals and dated this sixth day of July in the year of our Lord eighteen hundred and eighteen.

The condition of this obligation is, that if the obligees in this instrument, their heirs, executors or administrators, shall, within two years from this date, procure to be subscribed and secured to the Charitable Fund about to be established in Amherst, the Constitution of which was approved by the Convention holden at Amherst, on the twenty-eighth day of September last, the sum of fifteen thousand dollars, as part of the permanent fund of fifty thousand dollars of said Institution, according to the Constitution thereof and in fulfilment of their subscription of the same sum to said Constitution made previous to the twenty-third day of May last, then this instrument to be void; otherwise to remain in force.

Signed, sealed and delivered in presence of

{	DAVID PARSONS.
	JOHN LELAND.
	CALVIN MERRILL.
	JARIB WHITE.
	II. WRIGHT STRONG.
	SAMUEL F. DICKINSON.
	JOSEPH CHURCH, JR.

A true copy Attest, R. GRAVES, *Financier.*

LIST OF BONDS, NOTES AND OTHER SECURITIES

Given as substitutes for a subscription and bond of fifteen thousand dollars, executed to the Trustees of Amherst Academy by David Parsons and others, as part of the fifty thousand dollar Fund of the Collegiate Institution.

NAMES.	RESIDENCE.		AMOUNT.
Galen Ames	Springfield	Bond . . .	\$25 00
Timothy Allyn	West Springfield	Bond . . .	100 00
Daniel Abbott	Salem	Note . . .	25 00
Samuel T. Armstrong	Boston	Note . . .	100 00
Elijah W. Bliss	Springfield	Bond . . .	25 00
Enos Baker	Amherst	Bond . . .	100 00
Elijah Boltwood	Amherst	Bond . . .	500 00
Elijah Burbank	Worcester	Note . . .	50 00
Josiah Bumsted	Boston	Note . . .	100 00
Abel Baker	Boston	Note . . .	50 00
Andrew Bradshaw	Boston	Note . . .	25 00
Joseph Carew	Springfield	Bond . . .	100 00
Isaac G. Cutler	Amherst	Bond . . .	500 00
Levi Cowls	Amherst	Bond . . .	500 00
Oliver Cowls	Amherst	Bond . . .	500 00
Elias Cornelius	Salem	Note . . .	25 00
R. Chamberlain	Boston	Note . . .	300 00
Thomas McClure	Boston	Note . . .	50 00
Rev. John Codman	Dorchester	Note . . .	200 00
Pliny Cutler	Boston	Note . . .	100 00
Josiah Calif	Boston	Note . . .	40 00
Moses Dickinson			
Jonathan S. Dickinson	Amherst	Bond . . .	1,000 00
Artemas Thompson			
Jacob Edson	Amherst	Bond . . .	50 00
Nathan Dickinson	Amherst	Bond . . .	35 00
Thomas A. Davis	Boston	Note . . .	75 00
Theodore Eams	Salem	Note . . .	25 00
John Eastman	Amherst	Bond . . .	1,000 00
George Guild	Amherst	Bond . . .	150 00
P. & D. Goddard	Worcester	Note . . .	50 00
Henry Gray	Boston	Note . . .	300 00
John Gulliver	Boston	Note . . .	25 00
Joseph Goffee & Caleb Burband	Millbury	Note . . .	100 00
Hon. John Hooker	Springfield	Bond . . .	250 00
Joseph C. Heath	Amherst	Bond . . .	100 00
Shove Howland	Amherst	Bond . . .	150 00
Rev. Heman Humphrey	Amherst	Bond . . .	500 00
Rev. Daniel Huntington	North Bridgewater	Bond . . .	25 00
Joseph Howard	Salem	Bond . . .	50 00
Ebenezer Hayward	Boston	Bond . . .	50 00
Calvin Havin	Boston	Bond . . .	100 00
Hon. Samuel Hubbard	Boston	Bond . . .	500 00
David Hale	Boston	Bond . . .	25 00
Homes & Homer	Boston	Bond . . .	500 00
J. Jenkins	Boston	Bond . . .	100 00
Ward Jackson	Boston	Bond . . .	100 00
John Kent	Boston	Bond . . .	25 00
John Leland, Jr.	Amherst	Bond . . .	1,000 00
Leander Merick	Amherst	Bond . . .	200 00
John W. Langdon	Boston	Bond . . .	30 00
Amount carried forward			\$9,930 00

NAMES.	RESIDENCE.	AMOUNT.
<i>Amount brought forward</i>		\$9,930 00
William G. Lambert	Boston Bond . .	25 00
Heman Lincoln	Boston Bond . .	200 00
Elijah Upton	Boston Note . .	100 00
[N.B.— For this note, cash advanced by S. V. S. Wilder at the examination before the Legislative Committee.]		
James Means	Boston Note . .	100 00
James Mil'lege	Boston Note . .	50 00
Edmund Munroe	Boston Note . .	100 00
Elias Maynard	Boston Note . .	50 00
Ethan Ely	Longmeadow Note . .	15 00
Gaius Bliss	Longmeadow Note . .	12 00
Gideon Burr, Jr. . . .	Longmeadow Note . .	10 00
Rev. Baxter Dickinson	Longmeadow Note . .	10 00
Daniel Millet	Longmeadow Note . .	35 00
Elijah Nash	Hadley Deed of land, 200 00	
Daniel Noyes	Boston Note . .	100 00
Rev. Samuel Osgood	Springfield Bond . .	50 00
David O'iphant	Beverly Bond . .	100 00
John Safford		
Nathaniel Safford	Boston Bond . .	100 00
George Odiorne	Hartford, Conn. . . . Bond . .	500 00
Francis Parsons	Boston Note . .	100 00
J. C. Pray	Boston Note . .	100 00
J. C. Proctor	Boston Note . .	100 00
Ebenezer Parker	Boston Note . .	100 00
Gilman Prichard	Boston Note . .	25 00
John Rankin, Jr. . . .	Pelham Bond . .	100 00
David Richard	Worcester Note . .	50 00
William Ropes	Boston Note . .	200 00
Hardy Ropes	Boston Note . .	50 00
John D. Smith	Hadley Bond . .	50 00
Luke Sweetser	Amherst Bond . .	200 00
William F. Sellon	Amherst Bond . .	500 00
John Emerson Strong	Amherst Bond . .	200 00
Silas Sheldon	Southampton Note . .	50 00
William Sewall	Boston Note . .	100 00
Josiah Souther	Boston Note . .	25 00
Charles Stoddard	Boston Note . .	10 00
Stephen Sewall	Boston Note . .	25 00
Charles Hadley	Boston Note . .	20 00
Martin Thayer	Amherst Bond . .	200 00
Jeconiah Thayer	Boston Note . .	100 00
Samuel Train	Boston Note . .	200 00
Otis Tileston and } H. I. Holbrook }	Boston Note . .	37 50
William Treadwell	Boston Note . .	25 00
John Tappan	Boston Note . .	300 00
David Vinal	Boston Note . .	100 00
Otis Vinal	Boston Note . .	100 00
Thomas Vose	Boston Note . .	100 00
Enoch Whiting	Amherst Bond . .	300 00
Jay White	Amherst Bond . .	500 00
S. V. S. Wilder	Boston Note . .	500 00
Asa Waters	Millbury Note . .	100 00
Henry Whipple	Salem Note . .	50 00
John Wilson	Boston Note . .	25 00

 \$16,229 50

The First Annual Report to the Board of Overseers of the Collegiate Charity Institution in Amherst, by the Auditor of said Board, Aug. 28, 1822.

THE Auditor, having attended to the duties of his office, respectfully reports that the books, files, and vouchers in the hands of the Financier, relative to the Charity Fund, were found to be kept with care, order, and accuracy, and in a manner well calculated to guard against accident or mistake.

It appears upon examination that the instrument to which the several sums were subscribed which constitute the aforesaid Fund bears date May 23, 1818; and it is provided in and by the same instrument that all sums thereunto subscribed shall be voidable, unless the same shall amount to the full sum of \$50,000 within one year from the aforesaid date. It, however, appears that the sums subscribed between May 23, 1818, and May 12, 1819 (within the year limited), amount to \$51,734, and the sums subscribed since May 12, 1819, amount to \$460 making the whole amount of the subscription to the Charity Fund, \$52,194 00

Of this sum, \$7,401.25 have been paid, of which sum \$7,233.33 have been loaned by the Financier upon security of

Real estate	\$7,233 33
Sixteen thousand and thirty-eight dollars are secured by notes of the original subscribers	16,038 00
Fifteen thousand dollars secured by bond	15,000 00
Making the whole amount secured by mortgage, notes, and bond	\$38,271 33
Four thousand five hundred and fifty-four dollars and eighty-eight cents, subscribed in real estate, has been deeded	\$4,554 88
Land has since been purchased by the Trustees to the amount of	\$1,284 00
The Financier has received and is chargeable with interest paid on the Fund notes and bond	\$3,228 03
Principal received and not loaned	167 92
	\$3,395 95
And the Financier has paid for real estate purchased by the Trustees, which real estate is considered a part of the permanent Fund	\$396 13
Voted by the Trustees, at sundry times, to the Financier, for his services	1,287 00
Financier's account for expenses, etc., while in the service of the Board	180 67
Paid for fencing College lot	70 29
Paid John Leland, Esq., Treasurer	1,373 75
Loaned and secured by a joint note	650 00
	\$3,957 84
Deduct — due to Seth Nelson and Dudley Phelps, and secured by their mortgage, above the sums paid them	285 00
	\$3,672 84
Amount received by Financier	3,395 95
Which leaves a balance due Financier of	\$276 89

And the Auditor further reports that he has examined the books and vouchers of John Leland, Esq., Treasurer of the Institution, from which it appears that of \$1,373.75, the amount of interest on the Fund notes received by him, \$150 has been appropriated by the trustees for the payment of the tuition of beneficiaries in the academy. The residue, \$1,223.75, has been paid to the officers of the Collegiate Institution, and appropriated for the support of beneficiaries in said Institution.

All which is respectfully submitted.

LUCIUS BOLTWOOD, *Auditor.*

FUND RECORD.

YEAR.	AMOUNT OF FUND.	INCOME.	EXPENSE OF FUND.	NET INCOME.	PAID TO STUDENTS.
1822.....	\$52,194 00	.....	.....	.....	.....
1823.....	.....	.....	.....	.....	.....
1824.....	.....	.....	.....	.....	.....
1825.....	.....	.....	.....	.....	.....
1826.....	.....	.....	.....	.....	.....
1827.....	.....	\$1,681 55	\$189 33	\$1,492 22	\$1,639 00
1828.....	.....	1,945 48	190 00	1,755 48	1,709 00
1829.....	.....	1,581 03	215 00	1,366 03	1,557 00
1830.....	.....	2,070 25	215 00	1,855 25	1,555 00
1831.....	.....	1,813 00	215 00	1,598 00	1,422 00
1832.....	.....	2,032 26	215 00	1,817 26	1,611 00
1833.....	.....	2,241 74	215 00	2,026 74	1,890 00
1834.....	46,161 19	2,026 87	215 00	1,811 87	2,529 00
1835.....	46,632 27	2,349 35	215 00	2,134 35	2,540 00
1836.....	47,206 38	2,111 51	215 00	1,896 51	2,205 00
1837.....	47,380 89	2,150 76	215 00	1,935 76	2,135 00
1838.....	47,857 35	2,376 00	215 00	2,161 00	1,729 00
1839.....	48,299 21	2,201 64	215 04	1,986 60	1,379 00
1840.....	48,740 62	2,199 70	219 87	1,979 83	1,630 00
1841.....	49,405 67	1,815 55	210 00	1,605 55	1,872 00
1842.....	49,487 14	2,324 56	217 31	2,107 25	2,040 00
1843.....	49,706 79	2,236 90	217 50	2,019 40	1,929 00
1844.....	50,408 31	2,421 42	213 50	2,207 92	1,995 00
1845.....	51,224 17	2,639 06	220 87	2,418 19	2,250 00
1846.....	51,708 66	2,622 36	212 00	2,410 36	2,304 50
1847.....	52,207 65	2,595 47	215 13	2,380 34	2,096 00
1848.....	52,685 36	2,461 36	214 00	2,247 36	2,663 50
1849.....	53,568 67	2,633 75	223 00	2,410 75	2,870 00
1850.....	54,064 75	2,680 39	219 00	2,461 39	3,234 39
1851.....	54,521 60	2,484 28	220 50	2,263 78	3,108 00
1852.....	55,011 89	2,651 42	224 75	2,426 67	2,674 00
1853.....	55,520 49	2,639 98	228 50	2,411 48	2,597 00
1854.....	56,034 49	2,770 03	225 00	2,545 03	2,640 00
<i>Car'd for'd</i>		\$63,757 67	\$6,025 30	\$57,732 37	\$59,853 39

FUND RECORD. — *Continued.*

YEAR.	AMOUNT OF FUND.	INCOME.	EXPENSE OF FUND.	NET INCOME.	PAID TO STUDENTS.
<i>Bretford</i>		\$63,757 67	\$6,025 30	\$57,732 37	\$59,853 39
1855.....	\$56,548 10	2,768 05	226 00	2,542 05	3,555 00
1856.....	57,477 56	2,847 31	221 00	2,626 31	3,765 00
1857.....	57,959 64	2,660 40	231 50	2,428 90	3,211 00
1858.....	58,491 60	2,859 81	225 00	2,634 81	2,820 00
1859.....	59,093 63	3,035 14	228 00	2,807 14	2,508 00
1860.....	59,659 73	3,030 52	242 00	2,788 52	2,460 00
1861.....	60,093 82	2,370 47	230 00	2,140 47	2,625 00
1862.....	60,671 64	3,039 10	230 00	2,809 10	2,280 00
1863.....	61,287 40	3,278 91	248 75	3,030 16	1,635 00
1864.....	62,035 23	3,939 14	240 00	3,699 14	2,520 00
1865.....	63,478 10	4,376 34	235 00	4,141 34	3,715 00
1866.....	64,253 72	4,078 07	240 00	3,838 07	2,985 00
1867.....	65,076 07	4,104 79	340 00	3,764 79	3,380 00
1868.....	65,910 45	4,508 60	340 00	4,168 60	3,300 00
1869.....	66,665 73	4,158 14	381 75	3,776 39	5,180 00
1870.....	67,384 64	3,943 77	349 20	3,594 57	4,070 00
1871.....	71,248 60	4,480 75	374 85	4,105 90	3,280 00
1872.....	72,002 10	3,932 93	332 25	3,600 68	2,900 00
1873.....	72,794 04	4,293 99	334 25	3,959 74	2,985 00
1874.....	73,619 22	4,450 66	324 75	4,125 91	4,500 00
1875.....	74,374 36	4,169 64	393 90	3,775 74	3,570 00
1876.....	75,152 75	4,286 98	395 00	3,891 98	3,467 81
1877.....	75,864 08	3,891 23	374 58	3,516 65	4,300 00
1878.....	76,676 89	4,350 73	280 63	4,069 10	4,127 32
1879.....	77,472 86	4,293 43	313 56	3,979 87	3,691 37
1880.....	78,097 13	4,888 21	266 83	4,621 38	5,025 00
1881.....	78,817 14	3,876 03	267 61	3,608 42	3,670 00
		\$165,670 81	\$13,857 71	\$151,813 10	\$151,378 89

NOTE. — What is here given as Income is what is available for expenses and for students. It does not include the sixth, which by the requirements of the Constitution is added to the principal. By subtracting the amount here given as paid to students from the Net Income, it appears that there is a balance in the hands of the Treasurer of \$434.21; but as this table runs back to a period when the records are imperfect, and the generation of men then in charge has passed away, it is impossible to verify it. The present Treasurer reports that in fact the Treasury is now overdrawn to the amount of \$50.03. The recent decrease in the income is the result of a diminution in the rate of interest.

BOARD OF OVERSEERS.

		Residence.	Term of Service.	Length of Service.
1.	Rev. Theophilus Packard, D. D.	Shelburne.	1822-35.	13 years.
2.	H. Wright Strong, Esq.	Amherst.	1822-46.	24 "
3.	Rev. Thomas Snell, D. D.	North Brookfield.	1822-55.	33 "
4.	Rev. Luther Sheldon	Easton.	1822-36.	15 "
5.	Henry Gray, Esq.	Dorchester.	1822-33.	11 "
6.	Hon. Salem Towne	Charlton.	1822-42.	20 "
7.	Rev. Samuel Osgood, D. D.	Springfield.	1822-60.	38 "
8.	Henry Penniman, Esq.	New Braintree.	1833-45.	12 "
9.	Rev. Cyrus Mann	Westminster.	1836-54.	18 "
10.	Thomas Bond, Esq.	Springfield.	1837-50.	13 "
11.	Andrew W. Porter, Esq.	Monson.	1842-64.	22 "
12.	Hon. William Hyde	Ware.	1845-60.	16 "
13.	Hon. Ithamar Conkey	Amherst.	1846-62.	16 "
14.	Hon. Josiah B. Woods	Enfield.	1850-56.	7 "
15.	Rev. Christopher Cushing, D. D.	No. Brookfield.*	1855-	
16.	Rev. Rowland Ayres, D. D.	Hadley.	1855-	
17.	Hon. Edward Southworth	West Springfield.	1856-69.	14 "
18.	Rev. John M. Greene, D. D.	Hatfield.†	1860-	
19.	Hon. Charles Adams, Jr.	North Brookfield.	1860-79.	20 "
20.	Ephraim W. Bond, Esq.	Springfield.	1864-78.	15 "
21.	Hon. William B. Washburn, LL. D.	Greenfield.	1864-77.	14 "
22.	Eleazar Porter, Esq.	Hadley.	1870-	
23.	Marquis Fayette Dickinson, Jr., Esq.,	Boston.	1877-	
24.	Prof. William B. Graves	Amherst.‡	1878-	
25.	John C. Hammond, Esq.	Northampton.	1879-	

NOTE.—The first six members constituted the original board. Rev. Samuel Osgood, D. D., was chosen a member by the board itself at its first meeting. Rev. Christopher Cushing, D. D., Eleazar Porter, Esq., and M. Fayette Dickinson, Esq., took their seats on the board on the year of their election.

* Present residence, Cambridge.

† " " Lowell.

‡ " " Andover.

COMMISSIONERS.

	Term of Service.	Length of Service.
Col. Rufus Graves	1822-26	5 years.
John Leland, Esq.	1827-33	7 "
Hon. Lucius Boltwood	1833-66	33 "
Luke Sweetser, Esq.	1866-77	11 "
William A. Dickinson, Esq. . .	1878 —	

AUDITORS.

Hon. Lucius Boltwood	1822-33	12 years.
Rev. Samuel Ware	1834-55	22 "
Moses B. Green	1855-65	10 "
Rodolphus B. Hubbard	1866-69	4 "
George Montague	1870 —	

CHAIRMEN.

Rev. Theophilus Packard, D. D. .	1822-31	10 years.
Hon. Salem Towne	1832-35, 1839	5 "
Henry Penniman, Esq.	1836, 1841, 1845	3 "
Rev. Samuel Osgood, D. D. . .	1837, 1844	2 "
Rev. Thomas Snell, D. D. . . .	1838, 1843	2 "
Rev. Cyrus Mann	1840, 1842	2 "
Hon. Ithamar Conkey	1847-52, 1854-60, 1862	14 "
Andrew W. Porter, Esq.	1853, 1861, 1863	3 "
Hon. Charles Adams, Jr.	1864-67, 1869, 70, 1872, 73, 1876, 78	10 "
Hon. Edward Southworth	1868	1 "
Hon. Wm. B. Washburn, LL. D. .	1871, 1874	2 "
Ephraim W. Bond, Esq.	1875	1 "
Eleazar Porter, Esq.	1877	1 "
Marquis F. Dickinson, Esq. . .	1879-81	3 "

SECRETARIES.

Rev. Thomas Snell, D. D.	1822-36	15 years.
Rev. Cyrus Mann	1837-38	2 "
Thomas Bond, Esq.	1839-46	8 "
Hon. William Hyde	1847-57	11 "
Rev. Christopher Cushing, D. D.,	1858-79	22 "
Prof. William B. Graves	1880 —	

HISTORIC STATEMENTS.

SUBSCRIPTIONS having been obtained to the amount of \$50,000, to constitute a fund for the education of indigent pious young men for the gospel ministry, without regard to sect or denomination, and two spacious buildings having been erected for the accommodation of students, the institution was opened in the fall of 1821, under the presidency of Dr. Moore, assisted by able instructors, in all the branches of science and literature which are commonly taught in the American colleges. At the same time, about fifty scholars were admitted, and arranged into four classes. In the winter of 1823, when the number of students had increased to one hundred and eighteen, the Trustees petitioned the General Court for a College Charter.

THE FUND. Amherst College originally was founded on this fund of \$50,000, now known as the Charity Fund. For many years a number of the subscribers paid simply the interest on their subscription; some of these, by change of circumstances, failed to pay their subscription, and thus in 1834 the fund had shrunk to about \$46,000, and indeed some subscriptions which were then reckoned good ultimately proved worthless. Thus the fund did not regain the standard of \$50,000 until the year 1844. Since that period there have been some losses by the foreclosure of mortgages, but there have been also gains from favorable investments in stocks.

For many years the Charity Fund owned the entire college grounds, then twelve and a half acres, valued at \$180 an acre. The design in requiring one sixth of the income to be added to the principal was to preserve the amount of the principal intact; but as a result now, at the end of sixty years, the fund amounts to nearly \$80,000, well secured. The amount of the bond required of the commissioner is ten thousand dollars (\$10,000).

THE INCOME. The amount paid annually at first to each student was \$27. From 1841 onward, for many years, it was \$45. At present it is \$100; but the student is not benefited by this increased sum, for the amount of the term-bills has increased *pari passu*. Thus the increased income has enured to the benefit of the general funds of the college. There are instances, however, where, in accordance with the suggestion of the Board of Overseers,

special scholarships have been instituted which exceed the amount of the term bills.

MEETINGS OF THE BOARD. For six years, 1824, 1827, 1829, 1831, 1834, and 1846, there was no meeting of the Board of Overseers for want of a quorum; but in 1822, 1823, and 1865 there were two meetings each year.

RECORDS. Some of the papers, which were of historic interest respecting the fund, were destroyed by fire when the building in which the College Treasurer had his office was burned in 1838.

All the books and papers in the hands of the Secretary of the Board of Overseers passed through the great Boston fire in 1872, and were taken from the ruins in a good state of preservation.

IMPORTANT VOTES.

AUGUST 22, 1826.

"The Board of Trustees of the College having, by a committee, proposed so far to alter the Constitution as to unite at their pleasure the offices of Financier and Treasurer in one and the same person, the Board of Overseers took the subject under consideration, and after discussion, *Voted*, Unanimously, to alter said Constitution as proposed."

AUGUST 26, 1828.

"*Voted*, That expenses for managing the Fund be deducted from the avails of said Fund before one sixth of the interest be added to the principal for its regular and annual increase."

AUGUST 22, 1832.

"*Whereas*, This Board of Overseers is often embarrassed in its course of regular business by the want of a quorum of its members:

"*Resolved*, That if any member be absent from the annual meeting for two successive years, without a satisfactory reason rendered to the Board, his seat shall be vacated."

AUGUST 27, 1839.

The Board appointed a committee "to report to the Trustees in writing that" they were "dissatisfied with the manner in which the funds had been invested."

JULY 27, 1842.

"*Voted*, To accept the application of the Trustees to have the name of the officer, Financier, changed to that of Commissioner."

AUGUST 9, 1843.

Chose a committee "to present to the Trustees the opinion of this Board that the compensation paid the Commissioner for years past is now, since his labors are abridged, deserving consideration."

AUGUST 7, 1844.

The Board gave instruction to the Commissioner, as though he were their officer, directing him to make specific changes in the investment of the funds.

AUGUST 13, 1845.

"*Voted*, As the sense of this Board, that one sixth part only of the interest of the Charity Fund remain unexpended."

The Board took action also respecting the Stimpson bequest, and a committee reported "that on the state of facts it did not appear this Board had cognizance of it."

AUGUST 11, 1847.

"*Voted*, To request the Trustees to communicate the amount of bonds required of the Commissioner, and who are now holden as sureties."

JULY 13, 1864.

"*Voted*, Unanimously, that we regard it inconsistent with the proper character of a beneficiary of the Charity Fund to spend money for tobacco, and we request the Faculty of the college to look particularly to the habits of the beneficiaries in this regard."

"*Voted*, That in our opinion any student who shall be convicted of the vicious habit of 'hazing Freshmen' should be cut off from all aid from the Charity Fund."

JUNE 29, 1865.

The Board took decisive action as to the diversion of the income of the Charity Fund from the specific object for which the Fund was instituted.

JULY 12, 1865.

"*Voted*, That this Board would suggest to the Trustees the expediency of dividing a portion of the income of the Charity Fund, each year, into scholarships of at least \$100, each bearing the name of some one of the original donors; these scholarships to be given to such students as may be in specially necessitous circumstances, instead of the customary portion of the Charity Fund."

JULY 8, 1874.

"*Voted*, That a committee of two be appointed to obtain statistics as to the number of beneficiaries of this Fund who have not entered

the profession of the Christian Ministry, and that this committee also present to this Board, at the next annual meeting, a paper suitable for the recipients of this Fund to sign, by which they pledge themselves to enter the Christian Ministry, and in case they do not enter it, that they, if they become able, promise to refund the sum received, with interest."

JULY 7, 1875.

"*Voted*, That the Treasurer be requested to prepare for our use a list of all the students who have received the aid of this Fund during each year of the existence of the college, arranging it in the order of the classes."

JUNE 29, 1876.

"*Voted*, That no money should be paid to students pursuing a partial course."

JUNE 26, 1878.

It having appeared in the report of the Committee on Beneficiaries that a student had worked for the college in return for the money received from the Charity Fund, it was "*Voted*, That no such return for aid received can properly be required or accepted."

JULY 2, 1879.

"*Voted*, To request the Commissioner to bring in for our inspection the notes, mortgages, and other securities in his possession."

"*Voted*, That the President of the College be requested to present to the Board the bond of the Commissioner."

After a thorough inspection of all the papers, *Voted*, That the same were satisfactory, and the report of the Commissioner was accepted.

"*Whereas*, One loan has been made the past year on personal security, which is contrary to the requirements of the Constitution of this Fund; therefore,

"*Voted*, To instruct the Commissioner to change said loan as early as practicable, and to make a new investment in accordance with the Constitution."

"*Voted*, That the Commissioner be authorized to sell and convey, for such sum as he may deem expedient, any real estate the title to which has been foreclosed or transferred to this Fund under mortgage loan made therefrom."

JUNE 27, 1881.

"*Voted*, To appoint a Standing Committee on Investments, who shall examine all existing investments, and report thereon in writing at the next meeting, and advise with the Commissioner as to any investments which may hereafter be made.

"Voted, To request the Trustees of the College to instruct the Commissioner to make future investments of the Charity Fund only on approval in writing of the Committee on Investments.

“Voted, To request the Trustees to direct the Commissioner of the Fund to call in all mortgage loans, unless the debtors will make a satisfactory contract to pay all taxes hereafter to be assessed on the mortgaged premises ; and to direct the Commissioner to provide, in all future loans on real estate, that the mortgagee shall pay all taxes assessed on the granted premises, when assessed to the mortgagor or the mortgagee.

"Voted, That we suggest that the Commissioner shall keep the cash and bank account and assets of the Charity Fund separate from those of the College Treasurer and all others.

"Voted, That we instruct the Auditor hereafter to certify to the correctness of the cash account, and verify the amount of cash on hand."

SECURITY.

EACH beneficiary on leaving college is required to sign a note, after the following form, in order to avoid the liability of a student's availing himself of the aid of the Fund and then not entering the gospel ministry :—

No.

AMHERST COLLEGE

18

FOR VALUE RECEIVED, I promise to pay to the Trustees of Amherst College, or their order, Dollars, in five years from September 1, 18 , with interest from the date hereof: the same being the amount received by me this day from the Charity Fund of Amherst College: and this Note being on condition that at its maturity I shall not have been licensed to preach the Gospel, or shall not have been released from payment by the payees, or in some other legal manner.

ATTEST,

BENEFICIARIES.

WE have a record from 1836 to 1880 inclusive (a period of forty-five years), of 848 students who received aid from the Charity Fund.

Of these 145 did not graduate. 152 are now reported as dead.

The number reported as ordained is 439; three of them missionaries.

OCCUPATIONS.

The following are the occupations of a portion of the beneficiaries who are not in the ministry:—

Teachers, 40.	Judge, 1.
Lawyers, 21.	Surveyor, 1.
Physicians, 16.	Postmaster, 1.
Professors, 6.	Proof-reader, 1.
Agents, 5.	Writer, 1.
Farmers, 4.	Journalist, 1.
Manufacturers, 4.	Optician, 1.
Merchants, 4.	Druggist, 1.
Business, 4.	Dentist, 1.
Superintendents of schools, 3.	Supt. Children's Aid Society, 1.
Editors, 3.	Photographer, 1.
Publishers, 3.	Cashier of bank, 1.
President College, 1.	Civil engineer, 1.
President Life Insurance Co., 1.	Capitalist, 1.
Clerk Insurance Company, 1.	Broker, 1.
United States Consul-General, 1.	Drover, 1.

Whole number thus reported, 133.

REFUNDED.

Nine of the beneficiaries have refunded \$1,046. This is all Income, in distinction from Increment.

One student, who received aid from the fund and did not enter the ministry, has given \$1,000 to found a scholarship in the college.

THE PERVERSION OF FUNDS.

AMONG the ways in which funds may be perverted are the following:—

1. By appropriating the income to a different object from that for which the donation was designed.
2. By requiring the beneficiary to make some return for the aid received.
3. By raising the term bills of the students unreasonably, because the income of the fund affords a source from which the payment of the bills can be derived.
4. By retaining students for the sake of their term bills, when

their poor scholarship renders them unworthy to be retained, and drawing on the income of the fund for the payment of their bills.

5. By charging a student ordinary term bills while he is temporarily absent from college, and taking the amount of these bills from the income of the fund.

DEATHS IN OFFICE.

THERE have been but two deaths of members during their connection with the Board. In 1863 the Board adopted the following minute: "The Board of Overseers of the Charity Fund of Amherst College, recognizing the providence of God in the removal of one of their number by death, record with gratitude the remarkable fact that, during the forty-two years of the existence of this Board, there has never, until this year, been any instance of death among its members; and *whereas*, the late Hon. Ithamar Conkey, who held a seat as a member of this Board sixteen years, during which time he was never absent from the annual meeting, except in a single instance, and who presided as Chairman of the Board for fourteen years, has been removed from us by the hand of God, we would also express our appreciation of the punctuality, accuracy, courtesy, integrity, and Christian character of our departed brother, and our sympathy with the bereaved family in this afflictive Providence."

In 1870 the Board adopted the following: "*Whereas*, our esteemed associate, the Hon. Edward Southworth, since our last meeting, in the providence of God, has been removed from us by death, we would record our appreciation of his financial skill, his cultured manners, and his strict integrity, remembering his high standard as to the responsibilities of a fiduciary trust and his grateful companionship, we mourn his loss."

Only one Auditor has died in office.

In 1866 the Board "*Voted*, That, as in the providence of God the Auditor of this Board, Moses B. Green, Esq., has been removed by death, we would record our appreciation of his faithfulness in the discharge of his official duties, and our affectionate remembrance of his many gentle and amiable virtues."

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The Relations of Learning and Religion.

ADDRESSES

AT THE

INAUGURATION OF

REV. JULIUS H. SEELYE,

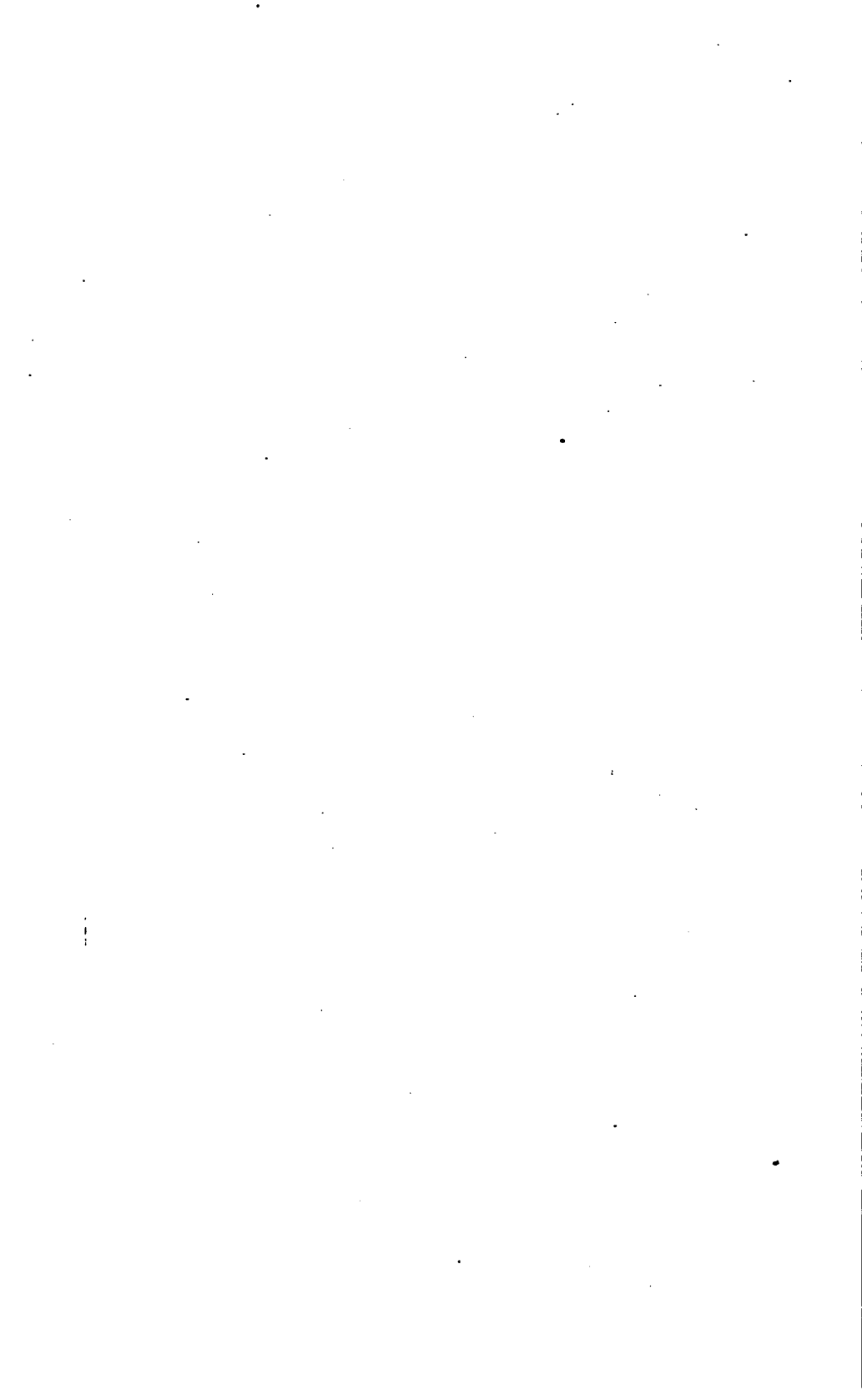
TO THE

PRESIDENCY OF AMHERST COLLEGE,

June 27, 1877.

PUBLISHED BY VOTE OF THE TRUSTEES.

SPRINGFIELD, MASS.:
CLARK W. BRYAN & COMPANY, PRINTERS.
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PREFATORY NOTE.

THE public exercises in connection with the Inauguration of Rev. JULIUS H. SEELYE as the fifth President of Amherst College, took place at the College Hall, Amherst, Wednesday, June 27, 1877, at three o'clock, P. M., and consisted of Prayer, by Rev. Edmund K. Alden of Boston; the address, on the part of the Trustees, by Rev. Roswell D. Hitchcock of New York, and the address of President Seelye; followed by the singing of an ode, composed for the occasion, by Rev. Albert Bryant of West Somerville, Mass. The addresses are herewith published by vote of the Trustees.

ADDRESS TO PRESIDENT SEELYE
BY
REV. DR. HITCHCOCK.

Reverend and Honored Sir :

THE whole College bids you welcome to its highest seat. Trustees, alumni, teachers and students are all united and earnest in the persuasion of your eminent fitness for this new position, united and earnest also in the expectation of your eminent success. You are no stranger here, and nothing is strange to you. Made President of the College after eighteen years of constant and conspicuous service in one of its departments of instruction, the element of novelty is almost wholly wanting. Retaining the chair in which you have earned your fame, you now merely add to its familiar duties that general oversight of the institution, with which you must be almost equally familiar.

You are also well across the threshold of the new office. The class that graduates to-morrow carries with it the memory of your first presidential year. And neither you, nor we, have anything to ask for

now but a repetition of this year's record for many and many a year to come.

The College is happy, and proud, to be led at last by one of its own alumni. Your four predecessors were all providential men. The four administrations lie in our history like so many geological deposits. The future need not contradict, nor criticise, the past; but a robust vitality instinctively asserts itself in better and better forms. We salute you, therefore, at once as the fifth, and as the first of our Amherst presidents.

To-day we promise, and we promise not, a new departure. There will be some new methods, and, we trust, new vigor, but essentially no new aim. Institutions, of whatever sort, are partly made, but for the most part they grow; so that no two institutions are, or ever ought to be exactly alike. This institution has its own most pronounced and most sacred traditions. Its original design, the training of Christian ministers, was soon widened to take in the broadest and most liberal culture. Sharp, solid, generous, manly Christian scholarship is now, and long has been our watchword. It is a very marked and precious feature in our history that, from the very beginning, science and religion, the science even of nature, have been equally emphasized. Our first president, and our third, were both of them distinguished for their zeal and for their attainments in natural science. In the great conflict that is now upon us, the conflict between science and religion, this institution has nothing to fear—I might

almost say it has nothing to learn. It is well armed, and looks forth boldly in both directions. It dares to say with one of old, "*Veritas, a quocunque dicitur, a Deo est.*" And then it goes on to say, with Picus of Mirandola, "*Philosophia quærit, theologia invenit, religio possidet veritatem.*"

The standard of required attainments in order to admission to college has been of late very considerably raised. Something more may still be done in the same direction. But, in my judgment, we have very nearly reached the proper limit. To require much more than is now required, will be to make, or try to make, the college into something else than a college. And the result will be that we shall lose our college, and get no university in place of it. Post-graduate courses of instruction may, however, be organized, and so we shall be able to push our brightest scholars to their utmost.

It must not be forgotten that the three grand staples of a liberal culture are Mathematics, Greek and Latin; and in this order. No mountain of facts can make any man a great scholar. His mind must be trained like a wrestler's muscles. He must have insight. He must master laws and principles. He must see the forest in spite of its trees.

The real instinctive scholar is also instinctively a gentleman. But scholarship may be acquired; and so, too, may the gentlemanly habit. It is one of the good signs of our time that so many of the old bar-

barous customs of college life have already been outgrown. Let none of them be spared. The memory of them is all we need for our cabinet of fossils. Let this institution be known as one within whose precincts no freshman is ever outraged, no son of poverty despised, no faithful instructor insulted, and it shall wear a crown of glory among its rivals.

But this occasion does not belong to me, nor to those whom I represent. We have given the college its new President, and now he must speak for himself and for it.

Henceforth, my dear sir, the college is yours in a pre-eminent and peculiar sense. We have no painful solicitude about its future. Your scholastic training, though ample, has not been exclusive. You have had recent experience in quite another sphere. You have also been round the globe, and stood face to face with civilizations older than our own. You will inspire, encourage and illustrate here the broadest culture. We shall send you raw boys, to be sent back to us accomplished Christian scholars and gentlemen.

And so, with good heart and hope we hand you these insignia of your high office. We put into your keeping the charter, the seal and the keys of the college. And you we put, and the college with you, into the keeping of Him who only is wise, and good, and great, the end of all science, and Lord of the rolling years.

INAUGURAL ADDRESS.

AMHERST College was founded by Christian people and for a Christian purpose. It was an association of Christian ministers, who, at Shelburne, May 10, 1815, started measures for the foundation of the College, and it was the Christian men and women of Franklin and Hampshire Counties by whom these measures were carried to their consummation. The inspiring sources of the whole movement were devotion to Christ and zeal for His kingdom. When the first college building was dedicated, and its first president and professor were inaugurated, September 18, 1821, "the promotion of the religion of Christ" was declared to be the special object of the undertaking, and the prayers which were then offered for "the guidance and protection of the great Head of the church, to whose service,"—in the language then used,—“this institution is consecrated,” have been since repeated with undiminished earnestness and faith, on every similar occasion. At the first meeting of the trustees after the legislative act of incorporation, steps were taken for the organization of a Christian church, which, when formed, was named the

Church of Christ in Amherst College, as indicative no less of the Catholic than the Christian spirit which should here reign.

It was the original purpose, from which the friends and guardians of the college have never swerved, that there should be here furnished the means for the highest attainable culture in science and literature and philosophy. The college was not to fall below the best in its intellectual provisions. But the constant and chief aim of its founders was to establish here an educational institution in which Christian faith might dominate, and whose power might subserve the knowledge of Christian truth. From President Moore, in whose saintly zeal the earliest students of the college found both instruction and inspiration, to President Stearns, whose purity and faith surrounded his presence like a halo, ennobling him and enlightening and elevating all who had contact with him, the controlling purpose of the college has been to provide the highest possible educational advantages, and to penetrate these with a living faith in the Lord Jesus Christ, and a supreme devotion to His kingdom.

In all this Amherst College is not peculiar. Other institutions of learning have been founded and carried forward with the same purpose. Indeed, here is the source from which directly and obviously, or indirectly, all our influences of education flow. The schools of the Christian world trace their actual

historical origin to the Christian church. As early as the third century we find it recognized as a Christian duty to plant schools for the nurture of the children and youth wherever churches were planted. In subsequent centuries, by recommendations and decrees of councils and synods, the attention of Christian ministers was everywhere directed to the establishment of town and village and parochial schools "because,"—as the third council of Lateran in 1179 decreed,—“the church of God as a pious mother is bound to provide opportunity for learning.” It was under this influence that England, in the time of Edward III., was called the land of schools, every cathedral and almost every monastery having its own.

The precise time and way in which the oldest universities of Europe arose cannot be definitely ascertained, but the evidence is clear that they directly owed their origin to the church, and were subject to her control. The University of Paris, the oldest of them all—with the possible exception of that at Bologna—was designated as “the first school of the church,” and the oldest public documents extant respecting it are ecclesiastical decrees for its management. The thousands on thousands who flocked to these seats of learning during the Middle Ages, exceeding by far,—whether we take their actual number or their relative proportion,—the classes since attending the same, were drawn thither,—so far as we can

judge from the results,—not so much by zest for study as by zeal for the service of the church. When kings and emperors added their efforts to those of synods and councils for the advancement of learning, as when Charlemagne extended schools through his empire for the education of the clergy, or Alfred, according to the old Warwick chronicler, erected the first three halls at Oxford in the name of the Holy Trinity, they sought for learning as the handmaid of religion, because they saw that religion was the conservator of the state. When the Reformation arose, its great religious quickening was a wide-reaching inspiration toward education, as well. The great reformers were well nigh as zealous in the work of education as in that of religious purification. “It is a grave and serious thing,” says Luther in his *Address to the Common Councils of all the Cities of Germany in Behalf of Christian Schools*, written in 1524, “affecting the interest of the kingdom of Christ and of all the world, that we apply ourselves to the work of aiding and instructing the young. I entreat you in God’s behalf not to think so lightly of this matter, as many do.” Melancthon equaled Luther in his zeal and surpassed him in his practical activity for the advancement of learning. He wrote textbooks on dialectics, rhetoric, physics and ethics, which were more widely used in schools than any other books of his time. No man, not even Erasmus, contributed so profoundly to the culture of the age as

did Melancthon. It was through a visitation of the churches and schools of the electorate of Saxony in 1527, in which more than thirty men were engaged through a whole year, that the so-called Saxon school system, which may properly be termed the basis of the modern German system of education, was drawn up by Luther and Melancthon. The great universities of Königsberg, Jena, Halle, Göttingen, and afterwards Berlin, owed their existence directly to the reformation, while those of Tübingen, Wittenberg and Leipsic received their character and power from the same source.

All our educational frame-work owes its cornerstone and informing law to the interests of religion. Our oldest college, founded less than sixteen years after the landing of the Pilgrims, and six years after the first settlement of Boston, had, says Johnson in his *Wonder-Working Providence*, "its end firmly fixed on the glory of God and good of all his elect people the world throughout in vindicating the truth of Christ and promoting His glorious kingdom." The original charter of Yale college declares the motive for the undertaking to be "a sincere regard to and zeal for upholding and propagating of the Christian Protestant religion." The first order made upon this continent for the establishment of common schools, was issued by the united colonies of Connecticut in 1644, and copied and re-declared by the colony of

Massachusetts Bay in 1647, in these remarkable words :

“ It being one chiefe project of y^tould deluder, Satan, to keepe men from the knowledge of y^e Scriptures, as in form^r times by keeping y^m in an unknowne tongue, so in these latt^r times by pswading from y^e use of tongues, y^t so at least y^e true sence & meaning of y^e originall might be clouded by false glosses of saint seeming deceivers, y^t learning may not be buried in y^e grave of o^r fath^m in y^e church & com^{on}-wealth, the Lord assisting o^r endeavo^rs,—

“ It is therefore ord^ded, y^t ev^y towneship in this jurisdiction aft^r y^e Lord hath increased y^m to y^e number of 50 household^m, shall then forthwth apoint one wthin their towne to teach all such children as shall resort to him to write & reade, whose wages shall be paid eith^r by ye^e parents or mast^r of such children, or by y^e inhabitants in gen^rall, by way of supply, as y^e maior p^t of those y^t ord^r y^e prudentials of y^e towne shall appoint; provided, those y^t send their children be not oppressed by paying much more yⁿ they can have y^m taught for in oth^r townes ; & it is furth^r ordered, y^t where any towne shall increase to y^e numb^r of 100 families or household^m, they shall set up a gramer schoole, y^e m^r thereof being able to instruct youths so farr as they may be fited for y^e university, provided, y^t if any towne neglect y^e pformance hereof above one yeare, y^t every such towne shall pay 5£ to y^e next schoole till they shall p^rforme this order.”

Though all our colleges and systems of common schools do not start so obviously from a religious impulse, though it is claimed for some that their source and aims are purely secular, there has not yet appeared any prominent and long continued educational influence, among us or elsewhere, wholly dissociated from a religious origin and inspiration. "I have always despaired," said a superintendent of public schools in Ohio, "of maintaining even a good common school, where there is not a Christian church to help it."

Is this wide-reaching relation of religion and education after all only accidental and temporary, or has it a rational ground, which is therefore abiding and on which, if we are wise, we shall still continue to build? There is at the present time no graver or more practical question relating to education than this, and none also on which more hasty and inconsiderate answers apt to be given, perhaps, on either side. It will help us to a clear view and correct conclusion, if we divest ourselves at the outset of the very common but quite superficial notion that there is an inherent law of progress in human nature, by which it is constantly seeking and gaining for itself an improved condition. Such a notion is not supported by the facts, either of history or of human nature itself. The facts of history certainly show a far more prominent law of deterioration than of progress. Over by far the larger portion of the globe to-day, and with by far the larger

portion of mankind, retrogression reigns instead of progress, and this is true as we look back through all ages. Progress not only has never been universal, but so far as records reach, it has always been confined to the few; wherever yet its fertilizing streams have flowed, they have been rivers in narrow beds, never covering the earth as the waters cover the sea. Moreover, in unnumbered instances where progress has begun, it has died out and disappeared. The evidences of this are as striking as they are mournful. No historical fact is clearer than that human progress has never revealed any inherent power of self-perpetuation. Arts, languages, literatures, sciences, civilizations, religions, have, in unnumbered instances, deteriorated and left a people to grope in the shadow of death, whose progenitors seemed to rejoice in the light of life. There is as yet no induction of facts sufficiently broad, if we had nothing else, to warrant the conclusion, that any progress that the world now knows is certain to be permanent or likely to be universal.

But these facts of history would not surprise us if we did but see that they represent, on a broad scale, only a deep-seated fact in human nature itself. Strange, and startling, and sad as it is, the fact will not be doubted by a close observer, that there is a much deeper impulse in human nature to throw away its privileges than to retain them. Endow a man with any possessions you please, give him any kind or de-

gree of culture, let his culture be clothed and crowned with virtue till he shines like the sun, and lesser stars fade in his light, and then leave him to himself; take away the restraints and incentives of society, free his thoughts from the claims of God and duty, and let only the dictates and desires which are bounded by his individual will control him, and how long before his glory will be gone, and you might search in vain among the ashes of his wasted privileges for a single spark of his former fire? The influences which perpetuate a man's culture, which give it strength and growth and fruitfulness are not of the man's own creation. They are not his in any sense, save as he receives them, and he can no more retain them than can he retain to-morrow, the light of the sun by which he walks to-day, and without whose continued shining he walks in darkness.

And it is no more within the power of human nature to originate than it is to perpetuate its progress. There are many current notions upon this point which a clear discernment would at once dispel. We crudely talk as though human nature by the evolution of its own inherent forces could lift itself from a lower to a higher plane, but in no case was this ever done. The historical fact has always been that the higher has first descended upon and breathed its inspiration into the lower before the latter has shown any impulse to improvement. In our processes of education, the higher schools have not grown out of the lower

and do not rest upon them, but the higher school is historically first, and the lower one is not its precursor but its product; there is no law of evolution by which the common school grows up into the college, for as an historical fact, the college is actually first, and gives birth to the common school. It is not by the lower education of the many that we come to have the higher education of the few, but the exact converse of this is the universal rule.

A great man who leads his nation or his age to a higher state is no mere product of forces belonging to the time of his appearance. What forces belonging to his time produced Moses, or Confucius, or Sakya-Muni, or Zoroaster, or Socrates? A great man is a God-bestowed gift upon his time, giving to his time a new day for which there is no approaching dawn, and whose coming is as unexplained by the conditions when he came, as it was unexpected by the people to whom he came. They are lifted by him to a higher plane, because he stands already, and from the outset, on a higher plane than they. So far as records of history go, no nation ever originated its own progress. No savage has ever civilized himself. The lamp which lightens one nation in its progress, has always been lighted by a lamp behind it.

But whence, then, does progress originate, and by what means is it perpetuated? A general answer to this question is not difficult. Divesting ourselves of all theories which prejudge the facts, and looking

only at the facts themselves, it is quite clear that the prime impulse toward human improvement, is not any desire for what may be called the arts or advantages of civilization. These have no attraction to a people which does not already possess them. They are not attractive to a savage ; on the contrary, he finds them repulsive. This, in fact, is what makes him a savage, that he hates the very condition in which the civilized man finds his joy. He is conscious of but few wants, and these of the simplest sort, which it needs but few efforts to satisfy ; and the gifts of civilization for which he feels no necessity, offer him, therefore, no advantages which he can appreciate, and can excite in him no efforts to obtain them. The first impulse to any improvement of a man's outward condition must come from the quickening of some inner inspiration, without which all the blandishments of civilization could no more win a savage to a better state than could all the warmth of the sun woo a desert to a fruitful field.

But the seed of this inner quickening can never be planted in the soul of the savage by advancing knowledge. He does not desire knowledge any more than he desires the power which knowledge brings. He is not only indifferent to his ignorance but he is unconscious of it, for ignorance is first of all and always ignorant of itself. An ignorant people has never yet leaped from its ignorance into advancing knowledge without some other impulse than the

knowledge furnished. In order that knowledge may be attractive and thus attained, the soul must be kindled by some inspiring sentiment, and thus we find as an historical fact that the quickened heart is the precursor of the enlightened intellect and the origin of progress with any people.

In the history of human knowledge, science is always preceded and quickened by art, yet art does not spontaneously originate. While the mother of science, she herself is the child of religion. These sentiments of the soul in which art finds its fountain, and from which all the streams of science spring, are the deep convictions of the soul's religious wants and its religious capabilities. Take to illustrate this any of the arts which mark the culture of a people and trace their origin and history. It might be crudely supposed that architecture arose from a natural necessity man has of furnishing himself a shelter and a dwelling-place. But allowing this natural necessity to exist, and supposing it to have found its natural expression, the result need have no more resemblance to architecture than have the huts of a Hottentot kraal to the palaces of Vienna and Versailles. Man's natural want of a shelter can be supplied, and if we look simply at numbers, is supplied by a great majority of men, with as little beauty and as little architectural skill as are found in the habitations of the ant or the beaver. But, aside from this, the truth is that the history of architecture does not begin with

the history of human homes. The oldest remains of architecture are symbols and monuments of religious faith. Columns and colonnades and temples, structures erected for worship, or to symbolize some object or doctrine of religion,—these, and not human dwellings, are the earliest indications we have of the dawn of architecture. Looking now, not in the light of any theory which prejudges the facts, but only at the facts themselves, we are obliged to say that it was not the construction of his dwelling-house that taught man to build his temple, but exactly the other way.

The same is true with sculpture, painting, poetry, music. It was a religious impulse which gave to all these their first inspiration. The oldest monuments we possess of any of these arts are associated with some religious rite or faith. But more than this, we must also notice the undoubted fact that the arts have grown in glory just as the religious sentiment has grown in power. The period of decadence in art is always indicated by a prior decline in religion. There is no high art, as I suspect we may also say there is never a great genius uninspired by some sort of a religious sentiment and impulse. As the seed whose growth shall fill the fields with plenty, and clothe the earth with beauty, slumbers in the earth in darkness, and with no signs of life till the warmth of the sun comes nigh, so all the thoughts of men, with whatever capabilities of art and science en-

dowed, lie dormant in the soul till some divine communication stirs the soul with the sense of its accountability and its sin, and kindles it with a longing for the favor of its God. If, as all the facts would indicate, even if we had no evidence from Scripture, man originally started on the high plane of these divine communications, from which he fell, all his subsequent degradation has had its stages exactly marked by the prior degree in which his knowledge of God has been clouded. The knowledge of God is the light of our inner life, and when this light grows dim or dies, the glory of great thoughts and noble deeds fades also and expires. I know not elsewhere so profound a statement of the law of history when men do not retain God in their knowledge, as Paul's in the first chapter of Romans: "Because that when they knew God they glorified him not as God, neither were thankful, but became vain in their imaginations and their foolish heart was darkened. Professing themselves to be wise they became fools, and changed the glory of the incorruptible God into an image like to corruptible man, and to birds, and four-footed beasts and creeping things. Wherefore God also gave them up to uncleanness through the lusts of their own hearts."

All this is quite contrary, I am well aware, to many current theories. I read in a late book by a noted author, "To believe that man was originally civilized and then suffered utter degradation in so many re-

gions, is to take a pitiably low view of human nature." But, alas, this is exactly the view which the sad facts of history oblige us to take, and we must square our views of human nature to the actual facts of the case, whether or not it would better suit our desires and our theories to have them otherwise. All the facts of history point backward not to an original savage state, but, as the deep thinkers of antiquity in the pagan world were constantly declaring, to an original golden age of peace and purity.

Aureus hanc vitam in terris Saturnus agebat.

Man became corrupt and degraded instead of being originally such, and as all his degradation comes from the darkness into which he plunges when he turns away from God, so it is not strange that his purity and upward progress are restored to him only as the light of God's communications shines again upon his soul. Here is not only the first impulse to human progress, but the only one which in our time, or previously, has shown any permanent power. Wild, uncivilized, barbarous, savage people are changing to-day to a state of peace and purity and advancing civilization, not by commerce or conquest of arms, not by letters, or science, or the knowledge of the so-called useful arts, but by the simple preaching of the gospel, by the story of God's grace, which makes a man feel that he is a sinner, and gives him his first longing for a better state. He who does not see the

exhibitions of this now taking place on different parts of the globe is blind to some of the most obvious and most important events of the present age. A naked, filthy savage, who has heard the story of the gospel and been brought to a living application of its strange truths, wishes at once to be clothed and clean, and becomes thus for the first time conscious of wants which his industry must relieve. Civilization, education, all progress starts with this inner quickening, which they could no more themselves originate than could the brooks which beautify the meadows, originate the mountain springs from which they flow. Clear observers now acknowledge the mistake of attempting to civilize a savage people through any other process than by a prior religious renovation. Plato saw this when he argued in *The Sophist*, that men merged in sensualism need to be improved before they can be instructed, they must first become virtuous before they can be made intelligent. .

The basis and life of all our present civilization are clearly seen to be in the Christian spirit and the religious quickening it has wrought. It was not the capture of Constantinople by the Turks, and the consequent scattering of Greek scholars over Europe, which led to the modern revival of learning. And it was not the grander proportions which the natural world assumed through the discoveries of Columbus and Kepler, nor the new method furnished by Bacon for the instauration of the natural sciences which has

led to so vast an increase of the study of nature in these modern times. The light before which the Dark Ages rolled away, and in which all the germs of our modern life have been quickened, was the dawn of the Reformation, which, long before the time of Luther, was falling on the vision of Tauler, and Eckhart, and Nicolas of Basle, and the Gottesfreunde, and the saintly men who wrote the *Theologia Germanica* and the *Imitation of Christ*.

And not only the dawn but the day of which we boast, has proceeded step by step from the clearer shining on the human soul of some truths which the Bible first revealed. It is a simple but most significant truth, that every stage of our modern progress has been preceded and inspired by a closer study of the Scriptures and a deeper reverence for them as the word of God.

These historical facts will not surprise the profound student of human nature. To such a student not only are the religious feelings seen to spring from the deepest susceptibility of the soul, but they are seen also to form the very ground work of intellectual development. The first impulse to know is always a feeling. The thoughts of the intellect are started and sustained by the sentiments of the soul. But

" These first affections,
These shadowy recollections,
Which, be they what they may,
Are yet the fountain-light of all our day,
Are yet a masterlight of all our seeing,"

do not have their object, do not find their source in finite things. The knowledge of the finite, instead of producing, presupposes the knowledge of the infinite. The disposition to measure and grasp the finite is not derived from the finite, for the finite, with no standard to measure, and no power to grasp itself, can originate no impulse to attempt these achievements. The first movement of thought, in so far as it differs from the thoughtless perceptions of the brute, is a movement to learn the ground and meaning of things. The first question asked by the human mind, and which also marks the mind's progress in all its stages, is the question, Why. But this question never could be asked save for the deep conviction that it could be answered. The disposition to seek the explanation of things could never arise but for the ineradicable conviction that the explanation can be found. But what does this imply when thoroughly considered? An explanation needing itself to be explained does not answer the mind's inquiries. These inquiries cease only when an ultimate and self-sufficient ground is reached. The mind rests only on what is itself at rest. But nature does not rest. Nothing in nature rests. Life in unnumbered generations rolling like a flood, light and heat penetrating space in perpetual pulsations, the winds, the waves, the stars sweeping, swelling, circling in ceaseless change, mark the restlessness of nature everywhere. Up and down this realm of things the human

thought wanders in its inquiries, seeking rest and finding none. One inquiry only answered by another, one fact of nature expounded by a farther fact, which needs itself an explanation by something still beyond, keeps thought ever baffled, keeps its products of philosophy and science ever tossing to and fro, and makes the mind in its thirst for truth like the traveler thirsting for water in the desert, before whose eye floats the distant mirage of flowing fountains and shining streams, which keeps beyond him as he travels toward it, and still mocks him with its delusion as he sinks exhausted in the sand. Only reason rests; only the supernatural rests, and the human mind in its inquiries into nature in its eager search for the unseen meaning of the things it sees, finds joy and peace only when it finds the supernatural.

But the supernatural marks the end no more than it does the beginning of the mind's inquiries. The supernatural is the alpha as well as the omega of the human thought. We never should be impelled to seek it but for its own stirrings already within us. That which the thoughts of our intellect are striving to formulate is already present in the sentiments of the soul. The mind's pursuit of science and philosophy is only its impulse to know what it already feels, is only its effort to become conscious of what is already its unconscious possession. The saying of Lessing is often quoted, "If the Almighty should hold out to me in His right hand all truth, and in His left

the search for truth, and deign to offer me which I would prefer, I would say, Lord, pardon the weakness of thy servant, yet grant me the search for truth rather than all truth." But could the human mind ever take such an attitude as this? Could we ever choose a progress which has no goal save the endless repetition of its own steps,—a way like that of Sisyphus rolling his stone up the steep mountain side, only to find it slipping from his grasp before it reached the summit, and ever rolling back into the valley again? No, no, we seek that we may find. The hope without fruition dies, and the hopeless search would not be undertaken by one who knew its hopelessness. The search for truth is excited only by the love of truth, and the love of truth bears witness to the presence of the truth within the soul, whose face that soul alone desires to see which has already felt its quickening embrace. But truth is inconceivable without God. Neither truth, nor beauty, nor goodness would have any meaning, or be anything more than words, which the unthinking brute might speak as well as man, unless they point to Him and come from Him in whom all beauty, truth and goodness find alone their exhaustless and eternal source and sun. They are not God; they are not parts of Him; but they are revelations of Him in whom we live and move and have our being, who is not thus far from any one of us, and who declares something of His glory to the eye which he has opened to behold it in

these radiant expressions of Himself. We call him glorious, whether artist, sage or hero, who has seen and made known to us the glory of these divine manifestations, and we link his name with immortal renown. But the glory is not in what he is, but in what he beholds. This it is which has furnished him his exaltation, and his fame, and which continually suffices to

“Disturb him with the joy of elevated thoughts,
A sense sublime of something far more deeply interposed,
Whose dwelling is the light of setting suns,
And the round ocean and the deep blue sky,
And on the mind of man.”

Thus the whole intellectual life hangs on what, in the most comprehensive sense, may be termed the religious life. Its original impulse comes from the religious life, and it will be strong and fruitful, only as this is profound and penetrating. That self-consciousness wherein we are distinguished from the brute, and in which the very being of reason consists, has not only as its constant attendant, but as its essential prerequisite, the consciousness of God. “To know God,” says Jacobi, “and to possess reason, are one and the same thing, just as not to know God and to be a brute are one and the same thing.” This knowledge may be very vague; its first dawns may be so dim that they can hardly be discerned from the feelings out of which they rise; it may often remain quite obscure, and may even be denied or derided by the very intellect which has derived

all its light and life therefrom, but the truth, still and forever remains that there can be no illumination of the intellect without a prior inspiration of the heart, and this inspiration of the heart is as meaningless and groundless without a divine impulse, as would be the light and warmth of earthly nature without the quickening presence of the sun.

In all this I have only uttered what the deepest students of human nature have, in all ages, seen and acknowledged. The truth I have stated is, I think, exactly what Plato saw when he said, in *The Republic*, "In the same manner as the sun is the cause of sight, and the cause not merely that objects are visible, but also that they grow and are produced, so the good is of such power and beauty that it is not merely the cause of science to the soul, but is also the cause of being and reality to whatever is the object of science, and as the sun is not itself sight, or the object of sight, but presides over both, so the good is not science and truth, but is superior to both, they being not the good itself, but of a goodly nature."

It is therefore not accidental that the actual historical progress of mankind in art, science, philosophy or virtue should depend, as we have seen, upon some religious impulse for its beginnings and continuance. Nor is it strange that schools and systems of education should have had no other source. It is only surprising when we fancy that the currents of progress can now be made to flow from any different

springs, or that the lamp of learning can be lighted or kept burning with any other flame. If we are wise we shall not only learn, but be guided by lessons which history and human nature both teach, that education divorced from religion is like a tree severed from its nourishing roots, which thereby falls to the ground, leaving its leaves to wither, its fruit to perish, and itself to decay. From such folly we turn, leaving the blind to lead the blind, not doubting what the end to them both will be.

What then are the practical consequences of this truth? What adjustments does it require in the processes of our higher education? It requires, obviously, that the corner stone and the top stone and the informing law of our whole educational fabric should be Christian faith and Christian freedom, the faith in which the true religious life finds its only sufficient root, and the freedom in which that same life finds its only adequate expression. We need Christian faith to perpetuate and perfect what Christian faith has begun. For, even if the fabric built upon this basis could be kept standing when its foundations were removed, its increasing beauty and living growth would then be gone. A Christian college, therefore, looking not at transient but at permanent ends, sowing seed for a perennial harvest of the farthest science and the fairest culture, will be solicitous, first of all, to continue Christian. If it is to be in the long run truly successful in the advancement of learn-

ing, it will have the Christian name written not alone upon its seal and its first records, but graven in its life as ineffaceably as was the name of Phidias on Athene's shield. It will seek for Christian teachers and only these,—men in whom are seen the dignity and purity and grace of Christ's disciples, and whose lips instruct, while their lives inspire. It will order all its studies and its discipline that its pupils through the deep and permanent impulse of a life by the faith of the Son of God, may be led to the largest thoughts and kindled to the highest aims, with an energy undying and an enthusiasm which does not fade. It will not be ashamed of the Gospel of Christ, nor remiss in preaching that gospel to its students "till they all come in the unity of the faith and of the knowledge of the Son of God unto a perfect man."

But this is to be taken in no narrow sense. Christian faith does not fetter, it emancipates the mind. Just in proportion to its depth and power is its possessor liberated from prejudice and superstition and all narrowness of thought. Christian faith is not only not hostile to free thought, but it finds its normal exercise and expression in this very freedom. It is itself in such exact accord with all the original endowments and deepest instincts of the soul—whose foundations were not laid in falsehood—that it is only settled more firmly in its seat by free inquiry. It is only when the thought becomes fettered and is no longer free that it fails to return—over whatever field it

may have ranged—to the faith which has inspired it.

In Raphael's famous *School of Athens* the great artist has represented Plato looking upwards and pointing to the heavens, but holding in his hand as his most characteristic work, the *Timæus*, wherein he seeks to bring upon the created earth the light of the uncreated heavens, while Aristotle, standing by his side, his eye lost in thought, but his fingers directed toward the earth clasps as his most significant treatise, the *Ethica*, wherein he would find the heavenly principle which should regulate the earthly life. The representation is worthy of the great genius who made it. Philosophy, where its inspiration is highest, and its investigations are deepest, reaches the same result, no matter in what direction it starts. Plato beginning with the heavens, looked so comprehensively that he saw the earth shining in the light of the skies, and Aristotle beginning with the earth, looked so deeply that he saw the heavens beneath it, the same heavens which Plato saw above. It is a mistake, though one often and easily made, to suppose that Plato and Aristotle only represent the opposite poles of idealism and empiricism. They differ in their method rather than in their end, for the idea, as Aristotle apprehended it, was just as much the object of his search, as of Plato's. They both agreed that the essence of the individual thing is in the idea, and that only ideas can be truly known.

And it is because of this original agreement,—this original unity of insight and aim—that in the end which each reached, the method and results of the one were justified by the method and results of the other.

In like manner Christian faith, if that be the object sought, may be reached by divers methods of inquiry, and we shall wisely welcome any tendency of thought, starting from whatever source and moving in whatever direction, which has this faith for its presupposition and is zealously bent upon discovering and declaring its sufficient grounds. Only that tendency of thought which divorces itself from God and the supernatural and the Christian atonement shall we wisely discard from our processes of education, and this not simply because such a tendency is untrue, but because it is necessarily empty and vain, because it has no power of permanent progress, and because the schools and systems of education left to its control, will become first superficial and formal and then barren and dead. We discard it just as Plato and Aristotle would both have discarded any speculations which did not presuppose and seek the idea as their starting point and goal, such speculations belonging, as Plato would say, only to a world of darkness and shadows, and being, as Aristotle would say, of necessity fruitless and dead. A philosophy which should expend itself upon the natural and ignore the supernatural and the spiritual world, would be, according to Plato, only a

phantasm deluding our vision and vanishing at our touch, and a science which should content itself with looking into the earth without looking through it unto the heavens, would, according to Aristotle, be buried in Cimmerian darkness or lost in Tartarean fires.

Gentlemen of the Trustees and the Faculty, Students and Friends of Amherst College: I take up the work assigned me, in the spirit, and with the aims I have thus endeavored to express. Far distant be the day when one intrusted with the interests of this institution in any degree, should set before him any other than the lofty aim which has prevailed in the history of Amherst College from its beginning to the present time. To Jesus Christ, the Son of God, the Savior, the College was originally dedicated, and to Him be it now again presented in a new consecration, ever living and all embracing. May He reign and ever be acknowledged in all its affairs! May He keep the College strong and progressive, and give it increasing power through the increasing strength of its faith in Him! May this faith be so firmly fixed, and so intelligently held that it shall be free and fearless in its exercise, emancipated from all intolerance and bigotry, showing itself in largest charity and sympathy, and giving speed and cheer to whatever seeks the knowledge of Christ, in whatever avenue the search be made, and yet, because it is a living and not a dead faith in Jesus Christ and his atonement, tolerating

nothing which makes its aim to set aside His claims !
May He guide continually the guardians of the College, and live in the life and speak through the lips continually of every teacher, and may all the students who, from the east and the west, the north and the south, shall throng these halls, be made complete in Him who is the head of all principalities and powers !
As the wise men from the East came and laid their gifts in adoring homage at the feet of the babe at Bethlehem, so may Amherst College ever show that the learning of the world, where it is highest, and deepest, and widest, and best, is content to sit at His feet and receive instruction from Him, who is not only wise but Wisdom, not only a true teacher but Himself the Truth, and whose words, which contain the sum of our faith, reach also, and ever beyond the summit of our philosophy !

UNIV. OF MICH.
FEB 23 1907

William Seymour Tyler.





AN ADDRESS

IN MEMORY OF

WILLIAM SEYMOUR TILLE

DELIVERED AT THE

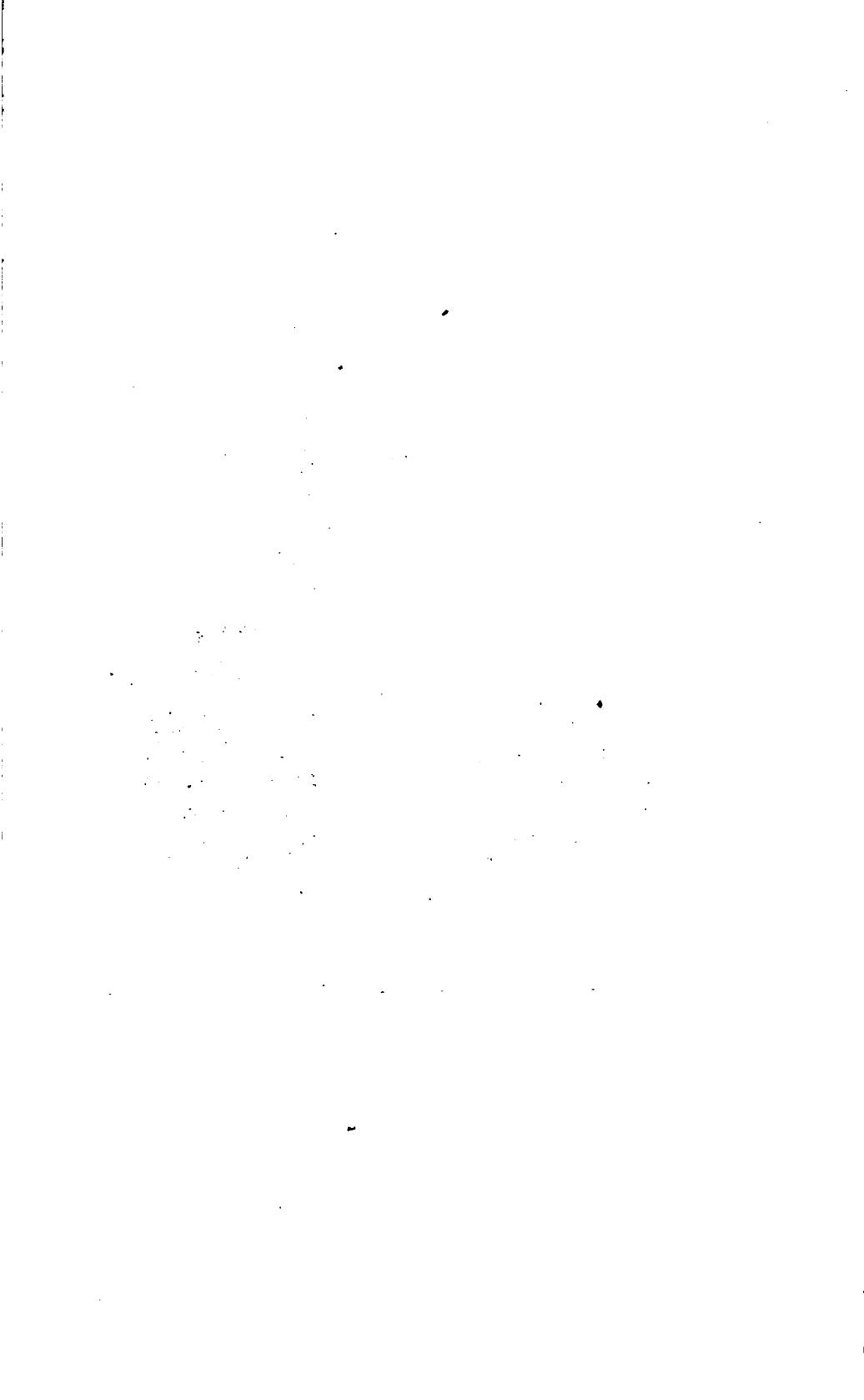
COLLEGE CHURCH AT AMHERST.

JULY 29, 1884.

BY

SAMUEL EDWARD H. BRICK, D.D.,

OF MOUNT VERNON CHURCH, NEW YORK.



AN ADDRESS

IN MEMORY OF

WILLIAM SEYMOUR TYLER,

DELIVERED IN THE

COLLEGE CHURCH AT AMHERST,

May 29, 1898,

BY

SAMUEL EDWARD HERRICK, D. D.,

OF MOUNT VERNON CHURCH, BOSTON.

δσα ἐστὶν ἀληθῆ, δσα σεμνά, δσα δίκαια, δσα ἀγνά, δσα προσ-
φιλῆ, δσα εὐφρημα, εἴ τις ἀρετὴ καὶ εἴ τις ἔπαινος, ταῦτα λογίζεσθε.

I approach the pious duty of this hour, my friends and brothers, with feelings of mingled reluctance and alacrity. My heart is in conflict with my judgment. I do not choose this service and yet I cannot decline it. The life and character of Professor Tyler deserve portrayal by a hand no less skillful than his own. The man, the scholar, the teacher, the Christian, all the aspects under which his life may be viewed, demand, for their just and adequate appraisal, a manhood, scholarship, devotion and faith, approximating at least to those of the subject. As we recall the characterizations which he gave to the world of so many of his illustrious contemporaries—Sabin, Dickinson, Stearns, Hitchcock, Humphrey and a host of others—and think how true and just and beautiful these characterizations were, one is tempted to wish that we might have Professor Tyler as sketched by himself. Only that, as Dr. Bartol

said of Edwin P. Whipple "his singular lowliness would have hidden the equally rare splendor of his own gifts."

But while I may not hope to "apprehend that for which I have been apprehended," I may claim at least one qualification for the service to which you summon me. Dr. John Brown of Edinburgh said of one of his old teachers, "He had that quality of primary minds of attaching permanently those whom he had relations to. His students never ceased to love him and return to him from all regions of the world. He was in this a solar man, and had his planets pacing faithfully round him." Professor Tyler was such a solar man. It became my good fortune to fall within the sway of his paternal and gracious influence when I was a boy but fifteen years of age. And thereafter, for more than forty years, he stood to me as the lawyers say "in loco parentis." For that solar relation of his was not only luminous and genial, but it was far-reaching and permanent. It extended to the very aphelia of his pupils' careers. Once mutually established, no distance of space and no lapse of time was suf-

ferred to rupture it. I can bring you, therefore, an appreciation of our old master. A biography you will not expect, and I shall not pelt you with dates.

Alexander the Great, it is said, held his copy of the Iliad in such honor that he set apart a jewelled casket from his Persian booty to keep it in. I wish I could do something like that for the story of this noble life. But "silver and gold have I none." I can offer only the simplest tribute of a profound admiration and a life-long affection. I shall not care even if I may seem to any to be partial and prejudiced. I know I shall hear in imagination at many a period of this discourse, the "Pause there!" with which he was wont to arrest us in Homer and Demosthenes and Æschylus and Plato; but I shall not heed even that imaginary injunction of his modesty as I try to tell you Amherst men of the nineties what Professor Tyler was to us of the fifties. Many of you I presume would say that you knew Professor Tyler. And yet you did not know him as we of forty years ago knew him. You knew him as the venerable sage, the ripened saint, the

hero who had fought his battles, run his course and kept the faith. We saw him in the heat of the conflict, under the mid-day burden, wrestling with principalities and powers, not always "in heavenly places," though always with a heavenly purpose and a holy energy.

When a nobly strenuous life comes to its close, it is generally discovered, I think, by those who have witnessed any considerable portion of it, to have had a large element of pathos in it. When it comes to its close, I say: for the glory of the cross is ever posthumous. Only retrospect can give atmosphere, proportion, true tone, to an action or a career. Thirty-five years Boston has waited for St. Gaudens to tell the story of Robert Shaw and his colored troops at Fort Wagner. She has done well. Now it is told fitly and finally. The heroes themselves could not have told, did not know, what they were doing, nor how they were doing it. Heroes never do. Hercules never felt when he was slaying the Nemean lion and plucking the apples of the Hesperides, what the sculptor of the Farnesian statue has put into that pathetic face, and into the se-

renely patient attitude, with the apples held modestly behind the back, as acquisitions after all of small account. And so Professor Tyler, I think, never realized the pathos or the strenuousness of his own life. It was a life of great hardihood, and mighty courage from the beginning. He gathered his apples, put them behind him, and took the next labor.

He was born amid the simplicities and asperities of Puritan and Colonial life. He has pictured for us the Arcadian scenes of his boyhood, in his semi-centennial address given at his birthplace, Harford, Pa., some twenty years ago. To journey back in thought and imagination to the time and place of that boyhood is like going back into some dim, almost legendary region. The little colonies that were going west from New England at the beginning of the century to subdue the forests of Northern Pennsylvania and Central New York, were repeating the earlier experiences of Plymouth and Salem and Haverhill. The wolves were intimately acquainted with their farm yards. Their fires were kindled in their rude stone fire-places from the flint and the steel, or

by coals brought from some neighbor's house half a mile away. It was a time of no carpets on the floors, and no pictures on the walls. The sofa was unknown, save as Cowper had just sung it in "The Task." Michigan with its furniture factories as yet was not. Kitchen, dining-room, living-room, were one. The good man Tyler, Justice of the Peace, transacted his business, and conducted neighborhood trials in the same apartment where the good wife baked her own pies, and washed her own dishes. Books were few; so few that a new accession to the family library made an epoch. The whole collection would be stored in one of those nondescript pieces of furniture which was book-case, escritoire, and chest of drawers, all in one. The clothing of the household was made from wool raised on the farm, spun in the house, and for the most part by the mother's own hands. The children of the family milked the cows and drove them to and from the pasture. The one old white horse took the father and mother, and an indefinite number of children upon their infrequent journeys through the obscure wood-paths. And when William

came to Amherst in mid-winter of 1829, there was no other way but to pack the boy with his books and clothing, bed and bedding into a sleigh behind the old white horse and drive from Monday morning before day, until Amherst was reached on Saturday at noon.

And yet the strenuousness of this frontier farmer's life was not without its abundance of cheer. It was softened, moreover, and glorified by dignity, intelligence, fine feeling. "Strength and beauty were in the sanctuary" of the Tyler home as they have ever been. Hard work and lofty thought. The parents sought the best things for their children, and taught them to desire the best things for themselves. Their pride and ambition all ran to virtue, integrity, good learning. They belonged to the aristocracy of old New England's religious and intellectual life. And it would be an interesting speculation, were there time to entertain it, to consider how far and how deeply in the life of our country, spread the influence of the moral and intellectual atmosphere of that one Puritan household. That influence, as it was incarnated in Professor Tyler,—especially as it

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mellowed, and softened, and grew gracious through the years when his own children were growing up around him—made itself felt upon generations of plastic students, who carried its undying impress to all lands under the sun.

In the middle of the century Amherst was poor. There were few students here from wealthy families—one or two perhaps upon every row of benches in the old Greek room—just enough to suggest to the rest of us what a pleasant and delightful thing it must be, to always have money in the pocket, and never have to wear thread-bare clothes. But there sat the teacher, who, as we all knew, thought never of the clothes, but only and always of the man. We all knew just what things were at a premium in that classroom, and just what coin would not be current. He dearly loved neatness, accuracy, adequacy in a boy's rendering, but he loved more an honest endeavor, even though it were accompanied with dullness in the intellectuals. The moral element was uppermost in all his judgments. There was what one of his old pupils called "a genial intolerance of slovenly rendering," when he knew

that there was a good intent. But when there was any shamming, or any unreality, the intolerance was no longer genial, but satirical and withering. There was no deceiving him, nor did he allow us to deceive ourselves. We knew at the end of a recitation just what marks would go upon the faculty records, and we knew that they would be righteous; righteous and kind. I remember once when we were reading the Iliad, one of our number had translated a passage with a fluency, and at the same time with an adequacy which in his case were altogether unaccountable, save upon the supposition that he was reading at sight from an inserted page of his "Bohn." Things went swimmingly until he came to the last sentence, which began with the Greek name of Juno, simply transferred, instead of being translated. Sublimely audacious, he read on, "Here the goddess interposed," etc. "Pause there!" said the Professor. "He-re, the goddess interposed, isn't it? Next!" That glib translation, like Achilles, was vulnerable only in its heel; but no need to further puncture it with question or unmask it by comment. It was all as kindly as a

flash of white light, and as thorough. There was the swift, electric illumination ; the immediate and automatic condemnation of a day of judgment, without the possibility of extenuation or appeal.

And yet his severity was much like the coat of a russet apple. It was well understood that beneath the austerity of his seeming there was an immense fund of paternal feeling that could be relied upon. He "dealt justly, and loved mercy." He was humane to a degree. He loved to find some point of view from which peccadillos might be regarded as excusable. He was a favorite mediator therefore upon those occasions of conflict which would now and then arise in the college community, between the conduct of the students and the judgment of the faculty. If he held a brief from us youngsters, we felt sure that the case would go well at Court ; if he refused to be retained by us, we were equally certain that the decision of the Court would be righteousness tempered by his leniency.

As a teacher, he brought his own personality to bear upon his pupils in a very remarkable way. The university method insulating to all

personality had not so much as knocked at the door of his class-room. What he taught was all unconsciously and yet profoundly saturated with the spirit of the man himself. First and foremost a class-room exercise was with him an act of religion. Professor Agassiz once said, "I never make the preparations for penetrating into some small province of Nature hitherto undiscovered, without breathing a prayer to the Being who hides His secrets from me only to allure me graciously on to the unfolding of them." Professor Tyler might have said the same concerning his daily excursions with his class into the domain of Greek Literature and Philology. There was a certain reverent humility in his entering upon the exercise of the hour, as of one who is entering a temple to worship. As Charles Lamb would have had "a grace before Milton, a grace before Shakspeare, a devotional exercise proper to be said before reading the Fairy Queen," so Professor Tyler approached a reading from the Iliad, the Phædo, or the Prometheus Bound. He was not more earnest, or more reverent in reading the Hebrew prophets and the Christian Apostles on

Sunday than he was in interpreting Æschylus or Plato on Monday. With him these also were prophets and apostles, though lacking it might be some higher and finer degree of inspiration. Their teachings were true theological preliminaries—threshold matters. With them he felt himself to be treading the outer and more ancient precincts of Christian Theology. In their moral and religious teachings, he saw the projecting lines of a divine intent. These were not merely the “unconscious prophecies of heathendom,” but Jehovah was there, “laying the beams of His chambers in the waters.” If we may not say that in those early days he had actually seized, yet I am persuaded that he was already glimpsing, that large and profound conception of the religious development of the race, of the God-ward struggle of the human soul, by which the scientific study of comparative religion has in these later times thrown into solution the old theological systems preparatory to some new crystallization. He made us feel that these old Greeks were vitally a part of our world of to-day—not only that they were endowed with the same human nature as ourselves

—but that as the growth of a thousand years ago still abides in the substance and beauty of some venerable oak yet vigorous, so their speech still vitalizes ours; their wisdom and experience are in our institutions and philosophies; and even their ethical and religious thinking must be taken account of to-day by any who would understand our own. He made us feel that Greek History and Greek Literature were a most precious and vital contribution to the providential education of the world, and that Plato and Æschylus, no less than Moses and David, were “school-masters unto Christ.” To be in his class-room and to catch his thought was to be liberated and liberalized, and made expectant and ready for all progress. He knew how to collate a page of Demosthenes with a column of yesterday’s newspaper; Socrates with Horace Greeley. I take it that not much is known to-day of the finical way of studying Greek which generally prevailed in the college class-rooms of forty years ago. That is largely thrust back into the preparatory school, as it should be. But at that time it was necessary for the professor’s desk to be more or less of a dissecting table. A

good deal of time had to be taken up in the minute analysis of orthographic forms. It was a "house of bondage," both for the teacher and the pupil. But notwithstanding this, Professor Tyler always managed to deliver us from the thralldom of the letter into the freedom of the spirit. How his rugged face would light up as if the teacher, the class, the whole hour, were redeemed when some bright pupil, like Mather or Ward, seized upon the spirit of a sentence of the Gorgias, and rendered it with idiomatic freedom into a bit of contemporaneous slang, or into a phrase from some recent speech of Wendell Phillips, or of Rufus Choate. And so he made us feel that the old world was still the living world, and that we were not so much walking and talking with the Greeks, as that the Greeks were walking and talking with us. His course with any single class was in itself a generous curriculum. He taught us rhetoric with Demosthenes, philosophy with Plato, logic and ethics with Socrates, literature with Homer, theology with Æschylus and Euripides and Plutarch.

Since these words were written I have been

avored with the sight of an autobiographical sketch of his life, left in MS. by Professor Tyler, which, in a single paragraph, so illustrates this spirit and temper of his class-room work that I must quote it. "In all the changes of teachers and the times for more than half a century; in required and optional studies; in regular lessons and in reading at sight; by recitations and lectures; in the text-books which I have edited, and the Socratic conversations by 'question and answer' which I have habitually held with my classes, my end and aim has been one and the same,—not to teach words only, but words in their inseparable connection with things, and *thoughts*, I take it, are the greatest and best things; not to teach the lesson only, or the language only, or the literature only, or the life of the Greeks only, but the lesson *and* the language, *and* the literature, *and* the life; and that not of the Greeks only, but of mankind as illustrated by that of the Greeks; not only that I might make Grecians but scholars, and not scholars but men, and not only men but Christians, for 'the Christian is the highest style of man.' So may Greek

always be taught in Amherst College." To which prayer of our dear old master, I am sure, every true son of Amherst will fervently say Amen!

As a teacher Professor Tyler was thus a true prophet—a John Baptist—the herald and forerunner of a better day for Greek learning; preparing the way for, and making possible, Mather and his broadening work. We may be thankful that he was permitted to see so much of what he longed for,—the superstructure whose foundations he toiled so strenuously, so humbly, so magnanimously to lay. He saw it without jealousy and with great delight. The thought, "He must increase, but I must decrease," brought nothing but joy to the humble old scholar's heart. In this last third of the century, speaking roughly, an era of great expansion in all directions, a period of great fortunes, great industrial corporations, great mercantile trusts, great gifts to causes of religion and literature, great institutional churches, great universities, great libraries, and perhaps we may add, great learning—under the stimulus of specialization—it is easy to forget or undervalue the prophet who "stood crying in the

wilderness, with garment of camel's hair, and leathern girdle about his loins, feeding upon locusts and wild honey." But whatever gospel of more generous culture may have dawned, or may yet dawn, upon Amherst College, she can never forget the one life which more than any other made such a new day possible. The time will come, if indeed it has not already come, when Amherst will be said to have had an Heroic Age; when men will point to the megaliths of her foundations, and discuss the stature and character of her early builders. What name will then be likely to have gathered to itself more of high renown than that of our great Greek teacher through well-nigh six decades? Then will be seen as we cannot see it, something of the power, the use, the beauty, the pathos of this heroic life. Many of his specific labors will doubtless be forgotten. This or that great blow by which he wrought may not be in evidence. His classical editions may become obsolete. The learning—marvellous for his day,—with which he entered into the great fight over the Homeric question, and beneath which he buried, as it seemed forever,

the paste-pot and scissors theory, and satisfied us all that "Homer wrote the Iliad, the whole Iliad, and the Iliad as a whole; Homer wrote the Odyssey, the whole Odyssey, and the Odyssey as a whole," will likely be lost sight of in the vast advances of criticism and philology. But that huge stretch of foundation work—binding into itself four complete administrations of college history—that work done on a meager salary—always for love and not for pay—work done under limitation—far from libraries—with great difficulties and almost no facilities—often thankless, but always patient, generous, faithful—that work, I say, will be seen in coming time, as the most momentous fact of our Alma Mater's first century. Professor Tyler may not have been the most conspicuous figure of any particular decade, but he has been by all means, taking the life of the college as a whole thus far, its most essential factor, the *commune vinculum* which has bound that life through all its administrations and eras into unity; I fear he would hardly forgive me for saying which has bound its separate hero-songs into a single epic.

There can be no fair estimate of his work here which does not take account of Professor Tyler in the College pulpit. As I have already intimated, he was greatly in demand as a preacher of occasional and memorial discourses. His protracted and intimate relations with great educational interests, especially in Central Massachusetts, his personal acquaintance with those who founded, patronized and filled the chairs of superintendence and instruction, and especially his insight into character, and his rare skill in presenting, not an outline nor a profile, but an all-round, stereoscopic, and at the same time an interior and sympathetic, view of his subject, made him the favorite literary biographer of the whole region. He was known to have great store of myrrh and nard, and amber and byssus, and so he became a sort of embalmer-general for the schools and churches of Franklin and Hampshire and Hampden counties. The bulk of his published discourses are probably of this character. But these were not the discourses which revealed his power. We remember him not as an orator, but as a prophet of God, and a preacher of right-

eousness. He was to Amherst, and about the same time, what the great President James Walker was to Harvard. In their literary quality his sermons were fine and strong; of great compactness and without redundancy; clear and sharp-lined; often epigrammatic, with shot-like sentences whose impact was felt and remembered. But their chief charm and power lay not so much in their distinctly literary and scholarly character, as in their profoundly ethical and spiritual force. He would seize upon some great fundamental principle in morals—he would take some short and pithy text, like “Let integrity and uprightness preserve me,” and flash it like an illuminating search-light all around the horizon, penetrating with it successively the realms of individual, social and national life, until every soul within the hearing of his voice knew what was the evil of the time, and what its anti-septic and its cure.

And his presentation of his theme was characteristic. It was synthetic and cumulative. His conception did not grow up before us as by some self-moved process from within—but it was *built up*; wrought, not cast; now by touches as grace-

ful as though he were a Benvenuto Cellini carving a hanap, and now by blow on blow like Siegfried forging his sword. When he had finished, the result was a *work*, massive, concrete, full of "strength and beauty." Often indeed, it was what the old Hebrew prophets,—whom he closely resembled in spirit and method—called "a burden." A burden carried first in his own soul, and then by this simple, earnest, cumulative process of disclosure,—revealing its righteousness and its reasonableness—it became a burden rolled upon the souls of his hearers. So he used that day of judgment—the great financial crisis of '57—as an occasion for settling his pupils in fundamental righteousness. So he used those days that quickly followed, when rebellion was being incubated at the South, and men at the North were divided and wavering, to hold Amherst College to loyal and patriotic integrity, and prepare her for the loving sacrifice which was so soon to be demanded of her—which was so soon to be demanded of himself, in the offering of his own first-born. And so, in a sense I suppose hardly contemplated by the author of the Epistle to the

Hebrews, in his use of the phrase, our Professor, from the College pulpit "wrought righteousness" and "turned armies to flight." His words, robust and brawny, did make righteous men, and fashion patriots.

But quite as patent in his pulpit-work as the spirit of the Hebrew prophet, was that of the Christian Apostle. The history of Amherst College has been marked throughout by frequently recurring periods of deep religious feeling. Such periods he looked for. He recognized what James Martineau calls "the tides of the Spirit." He was keen to detect the signs of their approach, and when they came he was in full readiness for them. It can hardly be said that he was first of all to be seen riding upon their crest. He was no drift-wood, sporting on the surface-motion of the hour. His nature was too deep and strong to curvet and caracole upon the eddies of emotional excitation. Homer and Plato must hold their steadfast place in the class-room through the week. He did not believe that men were to be saved by neglecting their appointed work. There was, it may be, some touch of tenderer light

upon the monotony of the curriculum, some gentler and quite indescribable feeling suffused "the dull dream of sense and custom." But when the Sunday came and it was the Professor's turn to preach, it was as though our John the Baptist had become St. John the Apostle. Not that his grand customary ethic was laid aside or forgotten, but the moral motive was suffused by something distinctively more personal and affectionate. "That which was from the beginning, which we have heard, which we have seen with our eyes, which we have looked upon, and our hands have handled of the Word of life; that which we have seen and heard declare we unto you, that ye also may have fellowship with us; and truly our fellowship is with the Father, and with His Son, Jesus Christ." There was the same synthetic, cumulative, method, the same upbuilding of his theme by tender touches and by mighty strokes on this side and that, until his sermon had become like a bed of his own Pennsylvania anthracite thoroughly on fire, and his conception was all before us, glowing with the steady ardor of the love of Christ, and we were made to realize that the Christian motive

transcended in its grandeur all other motives to scholarship, to manhood, and to all virtue.

But great as Professor Tyler was in the functions of teacher and preacher, he was greatest of all as the man and the friend. I have often thought, since I left College, that the feeling of many of his pupils while under him erected an imaginary barrier between him and themselves, which, unreal as it was, neither could quite break through. He certainly did his best to annihilate all distance and all fear. But it was when the pupil had gained his independent footing, and was doing his own work in the world, and the eyes of each looked level into the eyes of the other, and each greeted the other as a fellow-worker in the kingdom of God on earth, that we his old pupils realized what he was and what he always had been to us. Distance sometimes does more than lend enchantment. It rectifies our judgments. By some inexplicable paradox it discloses sympathies, and reveals in their true significance relations that have been but half apprehended and imperfectly utilized. Professor Tyler, great as he had been in the Greek room and in the chapel

pulpit, became still more to his pupils, as they thought of him from the banks of the Oregon and the Tigris, by the Golden Gate and the Golden Horn, in the cities of the East and on the prairies of the West, in the camp and in the kraal, in their pulpits and professors' chairs, in their editorial sanctums and courts of law. He has been the fixed star to which our eyes have turned from whatsoever quarter of the world,—the star of perpetual apparition in the old Amherst sky. To think of Amherst, has been, first and foremost, to think of him. The picture of "the elder brother" in our Lord's parable interprets his life, not by its likeness, but by its contrast. He has been our elder brother who has staid patiently at home, working the old farm, training the younger children, the stay and comfort of the venerable parent, the curator of our family history, keeping up the home feeling and the home traditions, and when we prodigals have returned from our wanderings, who so ready as he to kill the fatted calf and make merry for our home-coming? Never once thinking of any poor kid which had been denied him, or of

all that he had denied himself, but, with all his heart, rejoicing in the prosperity, or sorrowing in the adversity of his far-roving brethren,—true imitator and counterpart of the great Elder Brother of us all!

Venerable and beloved Master! Thou hast taught us by thy self-denial and patience; by thy courage and humility; by thy faithfulness and true manhood:—“Whatsoever things are true; whatsoever things are honorable; whatsoever things are just; whatsoever things are pure; whatsoever things are lovely; whatsoever things are of good report,—if there be any virtue, and if there be any praise”—*τὰ καλὰ καὶ τὰ ἀγαθὰ*—these things thou hast taught us—in all fidelity to thy Master and ours!



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THE
SCHOLAR'S OPPORTUNITY

BY

JOHN B. CLARK, LL.D.

PROFESSOR OF POLITICAL ECONOMY IN COLUMBIA UNIVERSITY

An Address Delivered at the Celebration of the Fiftieth Anniversary
of the Founding of a Chapter of the Delta Kappa Epsilon
Fraternity at Amherst College, and Published in
the POLITICAL SCIENCE QUARTERLY
for December, 1897

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THE SCHOLAR'S POLITICAL OPPORTUNITY.¹

A feature of recent presidential elections has been a distrust of the educated class. It is the day of the plain people ; and a claim to superior knowledge often injures a man's chance of gaining a hearing. It may seem, then, that this attitude of the public makes the scholar in politics a superfluity. What I hope to show, however, is that it creates a demand for scholarship of a high order, and that it offers to scholarship of this superior grade a larger field of influence than has ever before been open to it. The uprising of the plain people is the opportunity of the true scholar.

The knowledge that is to be a political power is not, indeed, of a kind so advanced that it cannot be imparted to the public. As there can be no esoteric politics, no knowledge that is worth anything in politics can bear a label of exclusiveness. Government is by the people. There should be a certain communism in the holding of intellectual property that is needed for public uses. Yet knowledge that is not at present common property must in some way make itself effective in the politics of the future. If it comes in the form of clear demonstrations it will be welcomed. The great democratic power that rules the state — except when bosses rule it and the state — is still ready to welcome one thing from any one who may offer it, namely, light. It knows its own interests and is glad to learn how to promote them. If any man is able to reveal the occult forces that, when they are understood, make for prosperity, he has something to offer that is as welcome as are compass and chart to a navigator. To the man who really grasps principles and understands what the multitude are, as yet, mysteries, there is now open a larger field for political influence than any historical situation known to me has offered.

¹ An address delivered at the celebration of the fiftieth anniversary of the founding of a chapter of the Delta Kappa Epsilon Fraternity at Amherst College.

The political system is taking its color from the industrial. The contests of the factory and the shop are more and more often fought over again in the larger field of party warfare. There are facts about our industrial system, some of which have recently been discovered, that will take some of the bitterness out of such contests. These are accessible to the men of the school and they are important to the men of the shop. I wish to point out a few of these things that genuine scholarship now sees, and that it can enable any one to see, if he will fairly examine the proofs.

The first fact that needs to be known is all-comprehensive. It is nothing less than the truth as to whether the present industrial system is worth keeping. Is the competitive system of creating and distributing wealth legitimate? Does it promise much for the future? One is startled by the assertion that so general a question has become a political issue; and yet it has become so. Socialism is no longer a mere speculation: it has emerged from the study in the shape of certain concrete and radical demands. Behind these are powerful bodies. We are asked to take industries, one after another, into the hands of the state, till, in the end, the government shall be the only employer of labor. Deep in the hearts of the men who make these daring and revolutionary demands is a conviction that the competitive system of industry is at bottom bad. From this theoretical view a whole genus of political movements takes character. It is the people as a whole who must meet the practical issue that this theory involves. Shall we strengthen the industrial system or shall we weaken it? Shall we keep it forever and let it evolve after its own nature, or shall we sweep it away and substitute a different system? It is the people who have to decide. The fundamental character of the social system is in debate, and the policy of nations is to be determined by the verdict that the common people will render on this subject.

Concerning the social system there are three views, any one of which a reasonable being may hold. That society is all that it ought to be, is not one of the three. That it

is tolerable, and is very good when it is let wholly alone, is one of them. This is the extreme *laissez-faire* position. Again, that society is wholly bad is not a possible view. That its fundamental tendencies are evil, however, is possible, and is the opinion held by socialists. The system, they say, has incidental features that are good ; but the forces that at bottom control it are making it worse and worse. The great abuse alleged is the systematic plundering of laborers. Competition, it is said, causes this ; and so long as competition continues, the plundering cannot be stopped.

Finally, it may be held that society, while full of evils, is fundamentally sound. The forces that at bottom dominate it, one may say, are working rightly. They work against the evils of the system and will steadily reduce them. Ultimately they will redeem the social state if we only secure for them a free field. This is a view the grounds of which I wish to indicate.

The first and second of the views that I have stated preclude much effort at reform. They make society, in the one case, so good that it does not particularly need to be reformed ; and, in the other case, so bad that there is no use in trying to reform it. The third of the views that I have cited — the one that I regard as the true one — makes every man a reformer. It gauges his moral quality by the amount of energy that he is willing to spend in trying to remove evils ; but it gauges his intellectual quality by the intelligence that he uses in the operation. If the social state is at bottom sound, there is something to be done for it. There are things to be cast out and things to be rescued. What, as I claim, educated men may know and ought to teach, is that society is fundamentally sound and therefore worth reforming. This first article of faith for an active citizen is not to be proved without intelligent thinking. Educated men need, further, to know and to teach how to reform it. Socialism is fascinating and dangerous because it promises, not to reform, but to regenerate society, and to do it in a cheap and rapid way. It has the advantage of telling us just how this is all to be done, namely, by letting the state become the sole employer of labor.

Almost any movement is strong if it proposes a definite remedy for public evils. "We intend to tax land up to its full rental value," says one party. If you object, there comes the quick retort: "What do you propose?" If you say "Nothing," you are lost. "We intend to debase the currency," says another party. If you say: "That will rob creditors, paralyze credit and drive gold into holes in the earth," the rejoinder is: "What is your remedy? We must do something." "I think," says the old-time doctor, "that your liver is out of order. I will bleed you and give you calomel." "But," protests the patient, "that will derange my system and make me weaker." "Have you, then, a remedy to suggest?" demands the doctor. "Alas, nothing but the curative forces of nature." In such a case pill and lancet carry the day. Similar results follow on a large scale when some men have violent cures for social diseases, and we suggest no alternative except waiting and depending on nature. *And yet nature is all-powerful.* There is no cure of disease, individual or social, that does not come through the action of her forces. Sick men are slowly learning to depend on them. Society has the same lesson to learn.

Particularly is the power of positive demands noticeable when what is proposed is the putting of all industries into the hands of the state. No other plan can possibly promise as much for the immediate future as does this one, and nothing can appeal with so much of positive force to working people. The violence of this remedy does indeed prevent us from adopting it; it is much as if what the doctor proposed were to take out the patient's heart and liver and to put them back again in reversed positions. We are deterred by the risks of the operation, yet the itching to do something is irresistible. The world doctor of the quack species, with his bold diagnosis and his promise of a cheap and rapid cure, is the fascinating and dangerous man. For trained thought there is, as the first difficult task, the detecting and the pointing out of the socially curative forces of nature — of the tendency of a society, as well as of a man, to get well if the laws of the system be

allowed to work. The task does not, indeed, end with this. There are positive things to be done in the way of reform. The socialist has no monopoly of definite proposals. The evils of the world may be understood, forces that pervert nature may be detected and repressed, and prosperity may be secured — though not in any cheap and instantaneous way.

Before speaking of these specific reforms, however, I wish to name a few more things that need to be generally known about the existing system of industrial society. This system is founded on competition, and its nature is to make the world as a whole rich. It has given to the American people what averages a thousand dollars apiece for men, women and children. Competition is called a war, but it is a rivalry in serving the public : that business man survives who can serve society best. If a man offers goods cheaper than others — if he is what we call a sharp competitor, what he is really doing is to give to people, in return for a given service on their part, more than others are offering. He outdoes his rivals in conferring benefits. If one's point of view is that of a business man contending for his position and having rivals who are trying to get away his trade, he may regard competition as a warfare. He may say that his rivals are trying to destroy him, and that self-defense compels him to try to destroy them. But how can he do it? Only by offering the utmost that it is possible for him to offer to the public. He must give all the goods that he can give for the money. Economics does not study the moral quality of the motive that is back of competition. Self-interest may set it working ; but what it does to the public is beneficent — and that we all need to know. If the world shall ever become an economic New Jerusalem, a city of literal gold, it must come about in this way. More and more perfect becomes the machinery that competition employs to gain its ends. It multiplies a hundredfold the product of labor. More and more automatic grow the engines; and more rapid, accurate and strong becomes the work of the tool. Touch the electric button and the machine shall work wonders for you ; and this effect is all traceable to that system of industry which enlists

every business man in a breathless race to outdo his rivals in serving the rest of the world.

The benefits of these services are, however, distributed unequally. What if they are apportioned unjustly? We have rich and poor; and it is said that these classes consist of plunderers and the plundered.

The first question here is not whether robbery exists, but whether it is due to competition. If the competitive process tends to stop it, our course is clear: we should make way for the forces of nature—let competition go on. This is one of the points at which a modern type of economic science can render a large service to humanity. It can meet, as an earlier science was unable to meet, the charge that the society in which we live is based on a principle of robbery. It has not always been possible to show how much labor can claim by right of creation; and the charge that the laborer creates all wealth, and that the capitalist filches away a part of it, has not been adequately met.

There is always a definite amount that labor can claim as its own separate product. The man creates something and the machine creates something. If we could see it, these amounts are definite. Labor owns a distinct fraction of the output of industry. It may, however, seem very difficult to decide what proportion of a product is due to labor alone. Send a man fishing with a canoe and fishing tackle owned by another man, and there is clearly a divided ownership in the catch. The fisherman owns a part of it and the capitalist—the owner of the canoe and the fishing tackle—owns the remainder. The part owned is in each case the part produced. But how much does the man alone produce, and how much do the canoe and tackle produce? Bring the fish to the shore and put them into two piles. Can you say of one, “This was caught by a man without canoe and tackle,” and of the other, “This was caught by a canoe and tackle without a fisherman?” Every fish is in reality a joint product: every fin or scale of a fish is such. What this means in the business world is that down to the finest tissues in the products of social industry there is

joint production. Every thread in a piece of cloth and every peg in a shoe owes its existence to labor and capital acting together : neither of them creates anything without the other.

There is a definite part of the product of industry, I have said, that is distinctly imputable to labor. With a little more time at my disposal, I could make an effort to prove this proposition, and to show, further, that the tendency of competition is to give to labor the share of the products that it creates. This is a momentous proposition, but modern political economy is able to prove it. If competition has its way, the men who run the machinery of the future will get their natural share of the goods that will result from the process. I do not say that they will, in fact, always get them ; but that is because competition does not work without obstructions. What we do know is that, if they fail to get them, it is because competition sometimes fails to do its work. Upon the obstacles in the way of competition, not upon competition, are we prepared to charge the dishonesty that attends modern industry. We are working according to a system that is at bottom fair in its dealings.

The indictment against society is, however, not yet fully met. What if, even with perfect honesty, it deals hardly with the working man ? It may give him what he creates and still give him little, because it only permits him to create a little : it may restrict his opportunities. Keeping still in mind what competition tends to do, we say that the system is widening the opportunities of labor. The workman's share of gains, being an honest share, tends to become larger. The amount of wealth imputable to mere labor tends to increase ; and with this increase there is a basis for an increase in wages.

What an employer can pay is limited in the long run by what he can gain by the workman's presence. Not for a long time is it possible for him to give to a laborer more than the laborer gives to him. The question of rising wages is a question of increasing productive power on the worker's part. Competition is putting the workers of the world into more and more fertile fields for labor. Fertility means not only that the

whole crop is large, but also that the part which is imputed to a working man is large, and that the man's wages increase correspondingly. The industrial world, with its whole equipment of farms and mills and shops and railroads and ships and canals and stocks of goods, is like a field which men till for a living. If this whole environment is rich and fertile, mere labor will signify much and get much. When competition adds shop to shop and machine to machine, it is multiplying the wage-paying power of society and making society pay laborers according to its new power.

There is a final count in the indictment against the social state. At best, it is said, its tendencies are undemocratic. Here is seemingly one point to be surrendered ; for nothing if not plutocratic is the business world. It has its captains of industry — and they are captains indeed, for they command their followers in the most autocratic way. They have a power over them which no governmental official could possibly have. Their millions of dollars are growing toward the limit of billions : the gulf between the extremes of society is widening.

Is even that true? In a sense the world is plutocratic, and I believe that it will be so to the end of time ; but in a finer sense it is democratic. If every man's possessions, small and great alike, were to be multiplied by ten, there would be less to choose between the status of a worker and that of a multi-millionaire than there is to-day. Not in mere possessions, but in the well-being that comes from possessions, such a multiplying of the means of production would have a leveling effect. As capital increases, wages rise. A Vanderbilt cannot have a thousand millions instead of a hundred, unless the country gets more and better railroads and more goods for the railroads to carry. An Astor cannot become a billionaire unless cities have more and better buildings. A Stewart or a Wanamaker cannot do it unless the buildings contain more and richer merchandise. All this means a more fruitful world for the workman to labor in. It means that he will produce a larger wage and get it. If he does get it, he will be the chief beneficiary of progress. He will never catch up with the billionaire

in possessions, but in the good time coming he may go far toward catching up with him in genuine well-being. Though he ever remain a mere wage earner, dependent on his toil, he may find that he gains on the rich man in the race for the actual enjoyments of life. The gulf between the richest and the poorest may in reality become a small one when the richest is a billionaire.

I was once passing a summer on *Somes' Sound*, at *Mt. Desert* ; and for recreation I hired a rowboat, fitted it with a sprit sail, and, with members of my family, voyaged from point to point on the island. One day there passed us a steam yacht that looked like an Atlantic liner for stateliness. There were fifty men sailing it and about five enjoying it. The latter was the number of passengers in my own little craft. As the proud steamer passed us it looked disdainful ; but it woke the echoes from the cliffs with its beautiful gong whistle, and it could not prevent us from enjoying them. I reflected with pleasure that I had not the coal bill to pay ; and I further reflected that there was little to choose, for real pleasure, between the condition of the party in the yacht and that of the one in my boat. Out of the breeze, the dancing water, the sunshine, the scenery, the echoes and the social pleasure that made up the total enjoyment of that summer's day, my own share was as great as the multi-millionaire's. If I had had no boat at all, the case would have been very different. I saw persons on the shore with no means of sailing, and I pitied them indeed. Between their state and mine there was a gulf ; between my state and that of the money prince there was no gulf worth mentioning.

Now, it is well within reason to hope that the worker of the future may reach the rowboat-and-sprit-sail level. At present he has no boat and may well envy the man who has one. But if he gets a modest craft, he will not need to envy the man with a steam yacht. The man with an assured and comfortable living is not greatly below the status of the man of uncounted wealth. "The abundance of the rich will not suffer him to sleep," says the Bible. We may look with equanimity on the

accumulating billions of the future. What their owners will get out of them is care. What we cannot help getting out of them is comfort and well-being. No possible condition can so far excel that of a workman of the future on four dollars a day as that condition will excel the present state of a man on two dollars. If the goods that a workman can enjoy be the test of wages, it is not beyond reason to expect them to be doubled and even quadrupled within a century or two.

It strains no one's credulity to claim great things for the effects of invention and discovery. What may not mechanical forces do? Old earth is still a sleeping giant. He has done some things for us : he has given us water power, steam and the crude first uses of electricity ; but all this is as nothing to what he can give. He has, as it were, lifted one drowsy finger to serve us. Fully wake him and your wildest imagination cannot take in the things that will happen. The waves that beat on the shores shall one day move our engines. The very turning of the earth on its axis shall give electrical energy, and nerves of copper shall carry that energy whither we will. It will be much as if the revolving earth were itself a driving wheel moving the smaller wheels of industry. The new machines will be embodiments of intelligence, and will become more and more automatic. Touch then the electrical buttons, and forms of utility and beauty will spring out of non-existence in Oriental profusion. They will fill the humbler homes of the world. Palaces will be built, of course, and the passers in the streets will get the benefit of them. Parks and pleasure grounds will multiply, and electric cars will take any one to them for a penny. All the world will travel. A journey around the earth will not count as a long one. Sojourning among the mountains or by the sea will not rate as a rare luxury. We shall democratize the finest pleasures. Withal we shall democratize culture. The school will keep its pupils till they reach maturity. Art and music will be at their command. With such things for enjoyment, the pupils will have the capacity to enjoy them. As recurring summers shall take us over the sea to strange and historic scenes, the traveling

will do for every one what it now does only for the *élite* and appreciative.

Pull down, then, the barns and build larger, capitalists of the twentieth century ! Add mill to mill, railroad to railroad, bank to bank, ship to ship. Your billions will do something for you; but they will do more for us — the democracy of the future. But pause! between us and all that is written one tremendous *if*. *If* only natural law works, *if* the world develops after its kind and unperverted, *if* forces of evil and of ignorance do not blight the prospect — then these things will happen. Here lies a second practical work that the state demands from scholarship; and the task is big enough to tax its full power. As a first service, scholars are to know and to make known the good forces and tendencies of our social system; as a second, they are to point out and help to remove obstructions, and so to let nature work.

This is not saying that we are to create prosperity by act of Congress. *Fiat* prosperity is elusive indeed. Hard times and good times must long alternate like the seasons; and an administration can create what is called a business boom only as Columbus created an eclipse of the sun — by waiting for it to occur and then claiming the credit of it. It is dangerous to suggest that anything that will quickly usher in a prosperous season can be done by the government. If what we refer to is the slow and sure improvement that is made, as one decade with its alternations of business conditions follows another, there is something to be done. Not a quick turning of hard times into good ones, but the making possible and real of the more general improvement that extends through a century — this great work is within human power.

We may enable competition to do its work and to lift humanity, not as quickly as though a mountain range were tossed into the air, nor yet as slowly as a mountain range actually rises by geological causes, but rapidly enough to inspire all who see and understand the process. Natural economic law must have its way, if it is to do this work. It is now interfered with. The task of the state is to stop these interferences.

Positive reform is a new and higher type of *laissez-faire*, for it is compelling powers of evil to let beneficent nature alone. "Hands off from competition in industry," is the word. Hinder not the grand dynamics of nature, but lay hands on whatever perverse agent may now presume to offer hindrances. The work is not simple; for it is not obvious what is natural and what is not. It is hard to see what task can be imposed on human thought which is more important than that of making a clear separation of what is natural from what is unnatural in organized life.

We have, for instance, a trust problem to solve. This can be accomplished only by the finest discriminations. A blind rush at the supposed enemy will not do it. Shall we simply say that the whole principle of combination is abnormal? Shall we bid our citizens to charge at a trust, wherever they see one, like a herd of bulls at a red cloth? That would be using the amount of intellect that a bull uses. The problem calls for the most careful thinking. There is that in the trust which is good, and there is evil also. The difficulty is to separate them and to secure the good only. It is not easy, but with enlightened thought it is possible. We have also a railroad problem to solve, and we can solve it only in the same discriminating way. Zeal must be according to knowledge. All of the power to make cheap rates and to give good service that comes through combination must be left. The power to cripple some industries and to build up others—to show favoritism and to play into the hands of monopoly—must be taken away. This is a hard task; but it is within the power of men who think.

Again, we have to meet a many-sided labor question which is changing its shape under our eyes with much rapidity. Trade unions for fixing wages are the salvation of labor. On no account should we repress them: we should aim rather to extend them. Yet a perfectly free hand to do whatever unlawful things their interests or wishes may here or there dictate, the state cannot possibly leave to them. What shall be allowed and encouraged? What shall be prohibited? If we make prohibitions, how shall we enforce them? This task will tax the

utmost sagacity of statesmanship. Optimism says the issue can be successfully met, because it must be met if society is to survive. Scholarship confirms the opinion, but it does not belittle the difficulties in the way of successfully solving this problem.

There are factory laws to be made and enforced. Working in the mills that supply us with goods there are helpless classes to be protected. A guardianship over women and children has been assumed by the state, and it must be exercised with great wisdom. There are the ever-recurring problems of taxation, and they become more serious and baffling as personal property becomes greater. Bad taxation is a perpetual incentive to communism. Of inheritance taxes we shall hear more than we have yet heard. I do not say they are necessarily bad; but it is clear, without saying, that they are capable of going to lengths that would mean disaster. You can always confiscate a property if you tax it at a high enough rate. Here there is a line to be drawn with difficulty between good and evil. We are starting on a course the farther stretches of which are perilous, and we must call a halt when impulse would carry us farther.

We have a general corporation problem to solve. This stands first in the order of time. The thing to be done is not merely to protect the public from the corporation as a whole: it is to protect the owners from the managers. "Director" must not be a tainted word: it must not even suggest a subtle and modern form of iniquity. Not till the stock of a railroad is a good investment for a workman's savings — and that is some time in the future — will society be all that it should be. Can we make stockholders safe? Not by mere reformatory zeal; possibly we can do it through zeal and knowledge.

Is this not enough? The things that I have enumerated are not all. More and yet more will the state demand of the men who are trained to look below the surface. There must be many such men. Schools must everywhere do their best to furnish them.

We are misled by the success with which we do things that

chiefly demand crude strength. "A nation that can put down the rebellion can settle a question of currency," said a statesman. If strength or even patriotism were all that such a problem requires, our sixty-six millions of people would find the task light. There is energy enough available when an evil really threatens us and force alone can avert it. Call for a fighting body to repel an invasion, and you will get a million men in a day; but generalship may be lacking. Call for a following of voters to repel a perfectly obvious and dangerous attack on the state, and you will get the men; but the statesmanship that would tell them just what to do may be wanting as before. In either of these cases they will

Come as the winds come when forests are rended;
Come as the waves come when navies are stranded;

but if the way be not clear, — if the nature of the evil and the mode of removing it be doubtful, — impulsive patriotism may be about as destructive as winds and waves. As against the evils that are growing up in the modern state, humanity appeals to the school. As against impulsive and blind reforms that try to attack the evils, but would actually rend the state in the effort to save it, humanity appeals also to the school. Before men who can see there is a vision of the future that nature, if she had her way, would give to us. It is bright beyond the pictures that socialism presents. It is assured by the forces of evolution that have made society what it is — *if* only we will let them work. Shall the vision become reality? The insight that makes this possible is the gift of scholarship to the people.

JOHN BATES CLARK.





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DISCOURSE

COMMEMORATIVE OF

Rev. Lewis Sabin, D. D.

PREACHED AT HIS FUNERAL,

IN

TEMPLETON, MASS.,

JUNE 11, 1873,

BY

REV. W. S. TYLER, D. D.,

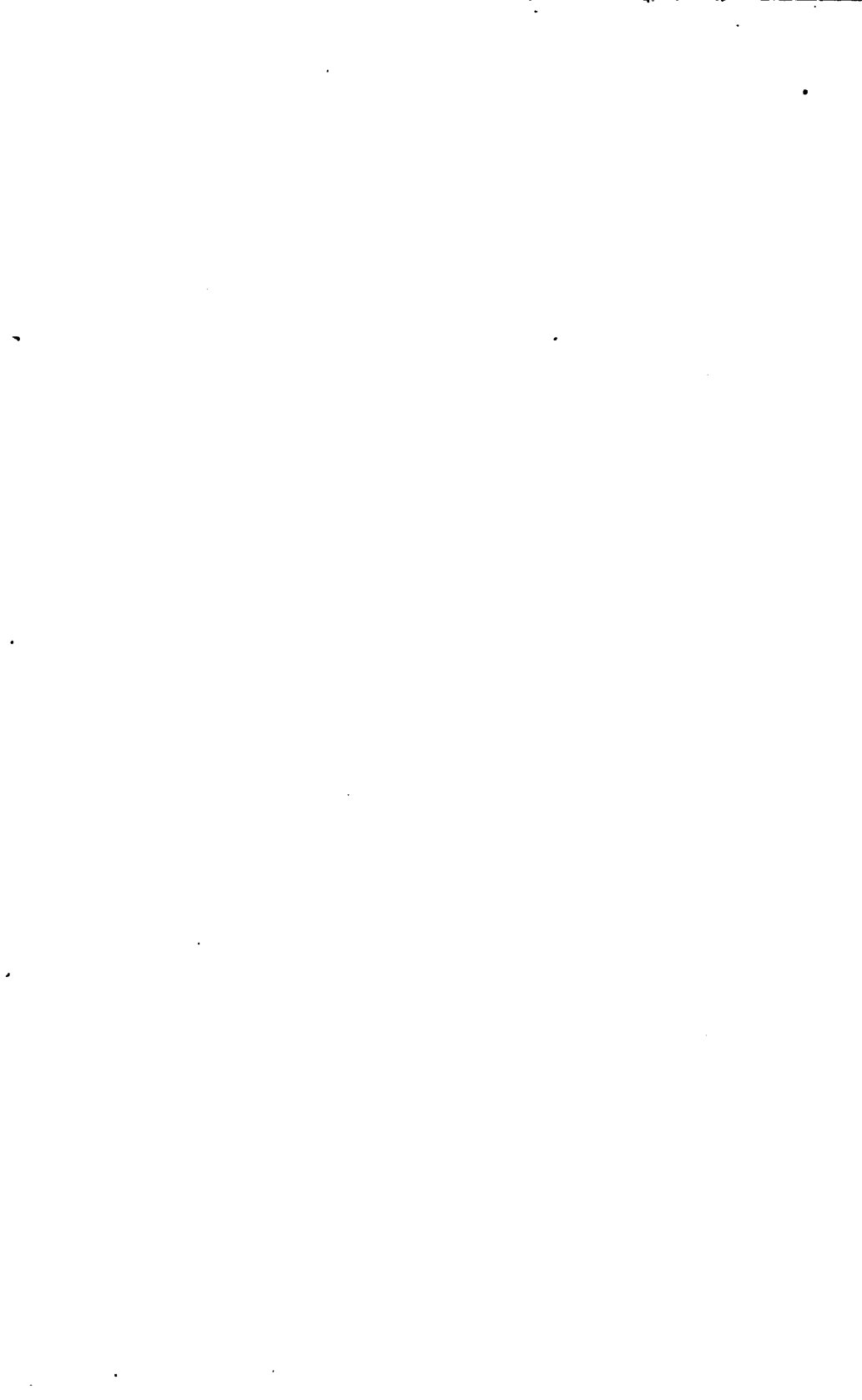
Williston Professor of Greek in Amherst College.

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1873.







By J. H. W. S. 1871

Lewis Sabin.

DE

Rev. Low

FIGURE

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THE

REVIEW, S. TYLER

Wilmington Professor of Law and History

SPRINGFIELD, MASS.

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1876.



Lewis Clinton.

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TEMPLETON, MASS., June 16, 1873.

PROF. W. S. TYLER—Dear Sir: At a regular meeting of the Church, the Church voted to instruct the Clerk of the Church to request a copy of the Sermon preached by you at the Funeral of Rev. Lewis Sabin, D. D., for publication. In accordance with that vote, I now request a copy of the Sermon preached by you at the Funeral of Rev. Lewis Sabin, D. D., for publication. We feel that its publication will not only give Dr. Sabin's numerous friends much satisfaction, but that it will be the means of much good.

In behalf of the Trinitarian Church in Templeton,

A. H. MERRIAM, *Clerk.*

AMHERST COLLEGE, June 18, 1873.

MR. A. H. MERRIAM, *Clerk of the Trinitarian Church in Templeton*—Dear Sir: The Sermon preached at the Funeral of Rev. Dr. Sabin, of which the Church so long under his pastoral care request a copy for publication, was written under an unusual pressure of private and public duties, and is very far from coming up to my conception of the subject and the occasion. But I do not feel at liberty to disregard the wishes of the Church, especially when accompanied with an expression of their belief that it will not only give Dr. Sabin's numerous friends much satisfaction, but will also be the means of much good. As soon, therefore, as I can find time so far to revise the manuscript as to make it legible, I will send a copy for publication, hoping that it may accomplish, in some measure, the end for which it was asked.

Yours very truly,

W. S. TYLER.



DISCOURSE.



Acts xi. 24.

For he was a good man and full of the Holy Ghost and of faith.

THIS is the description which inspiration has given of one of the earliest ministers of the Gospel, who had the honor of introducing the apostle Paul into the ministry to the Gentiles, and was himself honored with the name of an apostle, and whose wise counsels and faithful labors were greatly blessed in the growth, peace and prosperity of the apostolic churches. His biography is brief, as it is recorded in the Acts. He was a Levite, born in Cyprus, (that beautiful island of the Mediterranean, whose very name by which it was known to the Greeks and Romans, was associated with an extraordinary devotion to the corrupt and corrupting worship of the goddess Venus); but according to tradition he was brought up a fellow disciple of Saul of Tarsus, in the school of Gamaliel, in Jerusalem.

His first appearance in sacred history is soon after the day of Pentecost, when he sold his landed property, (whether in Cyprus or at Jerusalem we are not informed,) and brought the money and laid it at the apostles' feet. His Jewish name was Joses or Joseph. But from this time he is known by the name, ever since familiar and dear to the Christian

church, of Barnabas, which signifies the son of consolation or the son of exhortation, or prophecy, which was given him by the Apostles as a surname of honor, and doubtless also as a characteristic designation. Whether it designates his power as a prophet, or inspired teacher and preacher, or that tender and sympathetic nature which, guided and sanctified by the Spirit, made him the chief minister of the comforts and consolations of the gospel to the early Christians, it is not important for the church to know ; in either case, it is a high and honorable distinction. Chrysostom, the golden-mouthed orator and Father of the Church says, he was a mild and gentle person, and a son of consolation because he was so full of sympathy and love. The next we know of Barnabas, he meets Saul of Tarsus at Jerusalem after his conversion, essaying to join himself unto the disciples. When they were all afraid of him and believed not that he was a disciple, Barnabas took him and brought him to the apostles, and declared unto them how he had seen the Lord in the way, and how he had preached boldly at Damascus in the name of Jesus. According to the tradition to which we have already alluded, and which perhaps receives some confirmation from the circumstances narrated in the Acts, Barnabas had often attempted to win the companion of his early studies to the Christian faith, but in vain ; and meeting with him at this time in Jerusalem, and not aware of what had occurred at Damascus, he renewed his efforts, when Paul threw himself at his feet and informed him of the heavenly vision and the marvelous transformation of the blasphemer and the persecutor into the bold and eloquent preacher of the truth as it is in Jesus.

When the gospel was first preached to the Gentiles at Antioch, and a great number believed and turned unto the Lord ; and when tidings of this new, and according to Jew-

ish ideas, irregular proceeding having come to the church at Jerusalem, they wished to send thither some one of sufficient candor and discernment to report the truth, and at the same time wisdom and weight of character enough to harmonize all the conflicting views, Barnabas was the man whom they chose as their delegate and representative on this important occasion. And the reason why he was chosen, and why his mission was so successful, is contained in the words which I have selected as the theme of this discourse, "for he was a good man, and full of the Holy Ghost and of faith;" and the sacred historian subjoins, partly no doubt as the result of the character and influence of Barnabas, "much people was added unto the Lord."

No sooner had he accomplished this mission than he sets out on what was in those days and in that part of the world a long journey, to Tarsus in Cilicia; finds Saul (preaching the gospel, doubtless, in the place of his nativity), and brings him to Antioch, where they labor together a whole year with great success for the edification and increase of that mother church of the Gentiles. And the disciples were called Christians first in Antioch. From this time Barnabas becomes the companion of Paul in his journeys and missions. Twice he goes up with him as a delegate from the church at Antioch to the church at Jerusalem—once in anticipation of a predicted famine to bear the charitable contributions of the Christians in the former to their poorer brethren in the latter; and again to consult the apostles and elders in what is often called the first Council at Jerusalem touching the perplexing and agitating question of circumcising Gentile converts, and thus to restore harmony and perpetuate the peace of the two great branches of the Apostolic Church. Together were they recognized as the apostles of the uncircumcision by the apostles, elders and

brethren at Jerusalem. Together were they ordained with prayer and fasting and imposition of hands by the church at Antioch, and sent forth to the work of missions to which they had been called and furnished by the Holy Ghost. Together they go forth as apostolic missionaries throughout Cyprus and Asia Minor, preaching the gospel in the face of opposition and persecution, making numerous converts, chiefly among the Gentiles, founding churches and revisiting them to confirm and establish them in the faith.

A difference of opinion and feeling in reference to a young companion and helper in the work at length led to a separation between them. But the result was only a doubling of the missionary force and enterprise ; for Barnabas took Mark and sailed to Cyprus to continue and extend the work in his native isle, while Paul chose Silas and went through Syria and Cilicia, which was his native country, confirming the churches. And the epistles of Paul show that so far from any lasting alienation, Paul cherished the highest respect and affection for the companion of his early labors and conflicts, and ere long again associated John Mark, the nephew of Barnabas, who was the occasion of their separation, most intimately with himself in the trials and sufferings of his later life.

The subsequent history of Barnabas is unknown. Some have inferred, from incidental allusions in Paul's letters, that they became again fellow-laborers, and the early Christian Fathers are divided or undecided in their opinions on the question whether it was Barnabas or Luke of whom the Apostle speaks so honorably, as "the brother whose praise is in all the churches." The probability is that he suffered martyrdom early, perhaps in his second missionary tour to his native island. An epistle has come down from very early times

bearing the name of Barnabas, which was highly esteemed by the Fathers and the early churches, and was sometimes copied and preserved on the same parchment with the epistles of Paul and other writers of the New Testament. There is something very beautiful in the friendship and co-working of these two apostolic men who seem so unlike in their constitution, temperament and native character; but who for that very reason, doubtless, were drawn together in a warmer friendship, like that of David and Jonathan, and were only so much the better fitted to be coadjutors in the introduction of Christianity, as Luther and Melanchthon were in the Reformation. German commentators and divines often speak of Paul as the Luther, and Barnabas as the Melanchthon of the apostolic age.

This brief scripture biography of Barnabas is interesting and instructive in many ways. It is given quite incidentally in the Acts, as a mere appendage or companion-piece of the life of Paul. And yet it shows that such a man, though occupying a comparatively subordinate position, yet if he possess the right character and spirit, may be largely useful and not less essential than his superior to the full accomplishment of the divine plan. Although far inferior to Paul in talents, learning and influence, and filling only a subordinate place in the history of the primitive church, Barnabas recommended Paul himself to the acceptance and confidence of the apostles, inducted him as it were into the ministry, and introduced him into his work at Antioch as the apostle of the Gentiles. Barnabas was an apostle to the Gentiles less emphatically, but not less truly than Paul, was earlier and more literally the father of the church at Antioch, and began sooner if he did not contribute more, like Melanchthon fourteen centuries later, to pour oil on the troubled waters, to

mediate between contending parties and promote peace and harmony in all the churches.

The character of Barnabas is sketched in our text with even more brevity and conciseness than his life. It is drawn quite incidentally and assigned as a reason for the part he bore—bore so wisely and happily—in the establishment of the church at Antioch. “*For* he was a good man, and full of the Holy Ghost and of faith.” Such is the sacred writer’s description of one of the earliest and most useful ministers of the primitive church. Not much like the recommendations of ministerial candidates to the churches now-a-days. Not a word about his person or voice, his talents or eloquence, his learning, his manners or his accomplishments. Not an allusion to any physical or intellectual qualifications. There is reason to believe that he possessed superior mental and personal accomplishments. When the superstitious people of Lycaonia were carried away with the impression that the gods had come down to them in the likeness of men, and were ready to offer sacrifices to them, they called Paul Mercurius, because he was the chief speaker, and Barnabas Jupiter, doubtless because his presence and personal appearance corresponded more or less with their ideas of their supreme divinity. At the same time one interpretation put upon his *name*, and that perhaps the most commonly accepted by modern scholars, implies that he excelled in religious exhortation, and possessed the gift of persuasive, not to say inspired eloquence. But the graces and virtues which are specified in this description, are all moral and spiritual.

The first specification is that he was a *good* man. The last question to be asked or answered in regard to a candidate now! Overlooked, forgotten, or taken for granted, or asked and answered only for form’s sake at the very close of the

letter, perhaps in a postscript. It matters little which. Perchance, if the *goodness* of the candidate is too much insisted on, it will operate as an argument *against* him, just as when we say he is a *good* man, it is inferred and sometimes meant that he is nothing else, and therefore of very little account—just as when Macaulay calls Xenophon a *good* young man, he means, what he says elsewhere, that he was rather a weak man. Mankind are always inclined to admire greatness more than goodness, to prize gifts more highly than graces, to exalt genius and talents above virtue and piety. This natural tendency was never probably more exaggerated than it now is. And we are reaping the bitter fruits of this perverseness in business and in politics, not less than in morals and religion.

But the Bible completely reverses all this. It sets very little value upon personal attractions or intellectual powers, but makes everything of character. It says, Covet earnestly the best gifts; but there is a more excellent way, and that is charity, in other words, love, goodness.

The first qualification for a minister, or a member of Congress, or for any other officer, civil or religious, is that he should be a *good* man and true, a man of integrity and uprightness, a kind, charitable, benevolent man, a true Christian, loving his neighbor as himself, and doing to others as he would have others do to him. Then if he is a great man too, that is very well. Nay, real, substantial, unchanging, and unswerving goodness is a chief element of greatness. Indeed, it is the only true greatness. The good man is the only great man in the sight of God; and just in proportion as mankind grow better, and come to be more like God, he only will be great in the eyes of men also.

Besides being a good man, Barnabas was full of the Holy

Ghost. This is a favorite expression in the book of Acts. Some of the early Fathers called that book the Gospel of the Holy Ghost—and very justly—very happily, since that book narrates the work of the Holy Ghost, or rather the work of the risen and ascended Christ through the Holy Ghost, and by men who were full of the Holy Ghost, in the first promulgation of the gospel, and the establishment of the first Christian churches, as the gospels commonly so-called narrated the work of Christ on earth previous to his resurrection and ascension. This oft repeated expression denoted an abundant communication of all those gifts and graces, of which the Holy Spirit was the author and giver—power to work miracles, power to live a Christian life, power to preach the gospel and win men to Christ. In this sense the apostles and some others in the apostolic age were so full of the Holy Ghost, that, agreeably to the promise of their Lord, it was not they that spoke, but the Holy Ghost gave them what they should speak in every emergency—it was not they that lived or worked, but Christ by his Spirit that lived in them and worked through them. It was this that gave the feeble, frightened and scattered fishermen of Galilee, courage to preach Jesus to his murderers as the only name whereby men can be saved—wisdom to stand before magistrates and kings and speak what none could gainsay or resist—power to win men to the new religion by hundreds and thousands, in a day, and in a single generation to establish prosperous churches in all the chief cities of the Roman empire. The apostles were forbidden to enter upon this immense work, to which in themselves, they were utterly inadequate, till they received *power*—the power of the Holy Ghost sent down from heaven. And no man is really qualified, empowered or commissioned to preach the gospel anywhere,

in any age, till he has received this power in large measure from the same crucified, risen and ascended Lord, who shed it forth so copiously upon the apostles and other preachers of the gospel in the apostolic age.

The last characteristic which our text ascribes to Barnabas is that he was full of faith. He could hardly be otherwise, if he was full of the Holy Ghost, for faith is the first fruit of the Spirit. And the only way in which the Holy Ghost could impart to him *courage, strength, power* of any kind for his work, was through faith, for faith is not only the necessary condition of salvation, but the vital element and living essence of all moral and spiritual POWER. We believe, therefore we speak, therefore we act, thus we live, thus we conquer—this is the philosophy of all great achievements in business even, in society, in politics, in morals, and above all in religion. Whenever the church or the ministry has been strong—in the apostolic age, in the reformation, in the times of revivals and missions—it has been strong only in and by faith. And if the church or the ministry has been weak in any age—if it is weak now anywhere—it is weak only because it has lost this primitive, simple, childlike, undoubting faith in the truth and power of the gospel, or rather in the truth and power of God the Father, the Son and the Holy Ghost to reconcile and save a lost world.

Such is the character which the historian of the primitive church has recorded of one of the earliest and one of the best ministers of the gospel in the apostolic age. It is well for us often to refresh our memory of such characters, for, like all scripture, given by inspiration of God, it is profitable for doctrine, for reproof, for correction, for instruction in righteousness, that the man of God may be perfect, thoroughly furnished unto all good works, and that the people of God

may know and remember what kind of ministers the Head of the church chooses and will own and bless. And this lesson is made peculiarly instructive and impressive to us at this time by the circumstances under which, in the providence of God, we are now assembled. For if I mistake not, the brother whom He has taken from us, was, in the main, and making allowance for all human infirmities, a minister of this description. Was he not a Barnabas, a son of consolation to this people, among whom he lived and died? And was he not in the estimation of all who knew him, a good man, and full of the Holy Ghost and of faith?

Lewis Sabin was born in Wilbraham, Mass., April 9, 1807. His father, Thomas Sabin, an industrious, intelligent and respectable farmer, is still living and in comfortable health, and in the full possession of all his powers and faculties, at the age of ninety is here to-day, to follow to the grave, a son who had himself almost reached the age of three score years and ten. His mother, Abigail Sabin, died in 1857. She was a woman of more than ordinary intellect and excellence, uniting in herself the mental capacity, the amiable disposition and the consistent piety, which were so happily blended in the character of her son. Both his parents were exemplary members of the Congregational church. They had five children, three sons, one of whom was a minister, and the other two deacons of Congregational churches, and two daughters, both church members. Of these children, Lewis was the oldest.

At six years of age he removed with his father to Belcher-town. Although living nearly three miles from the center of the town and the meeting-house, and often, if not generally, obliged to walk to singing schools, lectures and religious meetings, he availed himself of every opportunity for mental,

moral and religious improvement which the town afforded. He became a member of the church at the age of thirteen. Having mastered the three R's and all the other branches which were then taught in the public schools, and graduated with honor at the district school in his neighborhood, he commenced studies preparatory to college, with Hon. Myron Lawrence, of Belchertown, and completed his preparation under Rev. John A. Nash, in Hopkins Academy, Hadley.

Entering Amherst College at the inauguration of the "Parallel Course," so called, (which allowed of the substitution of the modern languages and the physical sciences for the mathematics and ancient classics,) he was not carried away by the novelty or the popularity of the new curriculum, but with the wisdom and conservatism by which he was always distinguished, he chose the old time-honored course, and prosecuting it entire with indefatigable industry, graduated with the highest honors of one of the largest and best of its more than fifty classes—the class of 1831, and delivered the Valedictory Oration at Commencement. I doubt if he was ever absent from a Collège exercise. I know he never "flunked," nor "ponied," nor slighted a lesson. And his Christian life in college was no less exemplary than his life as a student. After his graduation he was the standing secretary of his class, and in 1866 he published a second edition of the history of this class, in which good sense and good taste, affection for his classmates and loyalty to his Alma Mater are alike conspicuous.

On leaving college, he engaged in teaching, as principal of Hopkins Academy—then a popular and flourishing institution—where he continued four years, excepting a part of 1832 and 1833, which he spent in the theological seminary at Andover. While teaching he continued his theological

studies under the direction of that sound theologian and excellent pastor, Rev. Dr. Brown, of Hadley. In August, 1835, he was licensed to preach by the Hampshire Association, and in June, 1836, he was ordained and went as a missionary to the eastern townships of Canada where, sustained by the Association that licensed him, he labored chiefly at Stanstead, with much satisfaction and success during his first year in the Christian ministry. "The church had previously been nearly broken up by divisions"—I quote from a history of Stanstead published in 1861—"but those divisions had been in a measure healed, and the time of his stay forms one of the brightest pages of its history."

On the twenty-first day of September, 1837—at the age of thirty, in the full maturity of his powers, and with no ordinary treasures of wisdom and experience, he entered here in this town and in this church, upon his first and only pastorate, which, continuing for thirty-five years, was terminated Sept. 24, 1872, at his own request, and with the reluctant consent of the church and congregation. The history of that ministry, its scenes and events, its labors and results, its sermons and lectures and meetings for prayer and conference, its baptisms and marriages and funerals, its revivals of religion and stated additions to the church and seasons of special in-gathering, its public services and private interviews, personal conversations and visits from house to house, these are all better known to you than they are to me. Doubtless, they all come back thronging your memories and almost rising up again before your eyes as you stand around his coffin and follow his body to the tomb. He has left on record his own recollections and impressions of them in his Quarter Century Sermon and his Farewell Discourse. What a record! Four thousand sermons, five hundred funerals!

What a work! Two hundred and fifty-seven additions to the church! What a harvest! Baptisms, marriages, prayer meetings and pastoral visits he does not enumerate. They were almost too numerous to mention. And he was not anxious to magnify the number or perpetuate the memory of his good works. The labors of a faithful pastor who remains twenty-five, thirty-five, forty or fifty years with the same people, exceed even the far-famed labors of Hercules. Those were but twelve in all, with long intervals of ease and pleasure. The labors of a long pastorate run on from a quarter to half a century, day and night without cessation, and with no end till the end of life. If we were to seek a parallel for the life-work of such a pastor in the mythology of the imaginative Greeks, it would be Atlas who was fabled to support the heavens day and night, year after year, without a day or an hour's rest for his weary and heavy laden shoulders. Well did an eloquent preacher turn and emphasize the language of the Apostle, making him to say: "He that desireth the office of a bishop desireth a *work*." But it is a *good* work. The rewards and results are commensurate with the labors. So Dr. Sabin considered them. So he found them to be in his own experience. You remember his testimony both in his Quarter Century Sermon and in his Farewell Discourse. "I have been happy in my work," he says, "and happy for having work to do, and such work as involves the highest aims, the best qualifications, the most pleasing and delightful duties, and brings richer rewards than any other calling,—rewards not in wages and pecuniary profit beyond other professions or employments, but in the endearing ties of affection and confidence, in the joy of winning souls to Christ, and in the approving smile of the Master." There have been at least four seasons

of special revival during his ministry, which were emphatically harvest seasons, feasts of in-gathering, times of refreshing and rejoicing, when he who went forth weeping, bearing precious seed, came again with rejoicing, bringing his sheaves with him. Each of these revivals brought an addition of twenty, thirty, thirty-five, forty members to a church which was in its infancy, when he came here, and had only eighty-eight members at the time of his settlement. Besides these special in-gatherings, there were additions of one or more at almost every communion, thus making up a sum total of two hundred and fifty-seven additions and a membership of three hundred and forty-five in the course of his entire pastorate, and leaving a small net gain after all the deaths, dismissions and fluctuations incidental to churches, especially churches in our small towns, which are losing rather than gaining in population. This is a good record, and owing doubtless very much to the fact that, while everything else has been changing, and the people, the young especially, have been passing away, the pastor has held on and the pastorate has been permanent. I believe in long pastorates. Dr. Sabin believed in them and gave good reasons for so believing—reasons which have been fully justified and demonstrated by experience in his own ministry, and the history of this church. If this long pastorate should be followed by a succession of short ones, with perhaps long intervals without a pastor, (which may God forbid,) it will not take thirty-five years for you to learn by sad experience how much you have been indebted to his wise, constant, persevering labors for keeping you together, a united, prosperous and happy people. I bow low before any man—it is a remark which I have often made, and this is a fit occasion for repeating it—I bow low before any man who, in these fast and changing times when every-

body is running to and fro, has remained a half or a quarter of a century the pastor of any church, especially a country church, and above all a small church in a small town which is all the while stationary, perhaps losing in wealth and population. That is a *wise* man, a *wiser* man, and a *greater* man too, than many who receive such loud calls from the gold and silver trumpets of our great and wealthy congregations. And it is a *wise people* that have the good sense to appreciate such a pastor, and the steadfastness and the Christian principle to keep him as long as he is willing to remain with them. There are few more beautiful and touching passages in all our Christian literature than that in Dr. Sabin's Quarter Century Sermon, in which he speaks of his contentment with his place and work in this pleasant country town, his peaceful life and abundant labors in this intelligent and attentive congregation, his heartfelt satisfaction with his generous and confiding people. "To young ministers," he says, "there is a fascination about a magnificent church edifice and a very large congregation which sometimes kindles their ambition and makes them uneasy in their humble sphere. I can think of college companions and competitors filling distinguished places in life, and of this and that friend in the ministry who preaches to as many people on one Sabbath as I do in five. They are worthy men, and I am sure they are faithful, laborious, able and devoted ministers. May God bless them all. I do not envy them, nor covet their stations. I do not shrink from work and responsibility. But I say with the Shunamite when the prophet asked her, 'Would'st thou be spoken for to the king, or to the captain of the host?' And she answered, 'I dwell among mine own people.'"

But Dr. Sabin's work and influence were by no means *confined* within the limits of his own parish. As a leading

member of the School Committee he has rendered invaluable service to the public schools. The town of Templeton has had no better adviser than he was, in town affairs and public interests. As he was never afraid to exercise his right of suffrage as a citizen, so he never hesitated to express his opinion in any matter that concerned the general good, and his opinion was not only heard with attention, but always had great weight in the decision of the question. All the inhabitants of the town, without distinction of sect or party, have found in him a true friend and wise counselor, a good neighbor and a peace-maker. Neighboring churches sought his advice in all their difficulties, while their young ministers have looked up to him as a father. He was never absent from meetings of the Association, and never failed to perform his part in the exercises. For many years he was almost the standing moderator of the numerous councils to which he was so often invited. The college where he was educated, and which in 1857 conferred upon him the honorary degree of Doctor of Divinity, in 1862 elected him a member of the Board of Trustees; and no member of that Board has been more reliable than he for constant attendance, wise counsel and devoted service. "I shall miss him greatly at our annual and our special meetings, where I expected always to see him, and always leaned on his good sense and practical wisdom for counsel and support." So said President Stearns, when he heard of the death of Dr. Sabin. And the prayer which he offered at morning prayers in the chapel this morning, when we were about leaving to attend the funeral, showed how much he felt his own loss and the loss of the college, and how earnestly he desired that it might be sanctified to officers and students.

Deeply interested in whatever concerns the welfare and

progress of mankind, and keeping himself acquainted with passing as well as past events in human history, he labored to inspire his people with an intelligent interest in the cause of universal liberty and philanthropy as well as Christianity. By precept and by example, he inculcated a missionary spirit with such success that his church, though neither large nor rich, has contributed during his pastorate not less than twenty thousand dollars directly to the several forms of missionary work, while it has had also *living* representatives in the missionary fields of our own country and of other lands. At the same time with equal courage and prudence he went before his people as their spiritual leader in the moral conflicts of our age and country against intemperance, slavery and the great rebellion, and to his influence the town is largely indebted for its noble record of heroes and martyrs in the late war.

Nor is the catalogue of his labors and services complete without adverting to some of a more personal and partly secular kind. Mr. Sabin was an indefatigable worker and a distinguished scholar, and like the leading pastors of the last generation he turned his untiring industry and his high scholarship to good account by sometimes taking private pupils. One of the best services which he rendered to his beloved college was by consenting to take into his family and under his instruction students whom, for bad conduct or poor scholarship, or because they did not know what else to do with them, the Faculty were obliged to send for a few weeks or months into the country. Hence the parish and parsonage of Dr. Sabin became familiarly known in college by the facetious but classical name of "the Sabine Farms." Nor did the young men themselves feel under less obligations to the good Doctor and his excellent wife than the college. They always

came back saying, they had not only had good instruction and good care and keeping, but they had had a good time. It is only a few days since that one of them who now occupies a high position under the very eaves of the college said to me: "It was about the best thing Amherst College ever did for me, when she sent me to spend six months under the roof of Dr. and Mrs. Sabin."

There was one thing in which Dr. Sabin went beyond even the old-fashioned country minister of former generations. He wrote wills, settled estates, took care of widows and orphans, and if he could not be considered as the lawyer and justice of the town, he at least in no small measure superseded the necessity of any lawyer or justice of the peace in this community. Perhaps he might be said to have been the physician also of the place, since by precept and example he contributed so largely to the health of the neighborhood, and while he almost never had occasion to call the doctor to his own house, did all he could to help his neighbors dispense with the doctor's services. He deemed it his *duty* to take care of his health. He thought it his duty to take care also of his property. And he did take as good care of his property as of that which was entrusted to him by others. It is often charged upon ministers that they know nothing about business and are destitute of worldly wisdom. They are sometimes as ignorant but not as innocent as children in such matters. But no man who knew Dr. Sabin would lay this to his charge any more than on the other hand they would reproach him with being an unspiritual and worldly minded minister, who took better care of the salary and the parsonage than of the pulpit or the parish. By his practice as well as his preaching he taught his people that economy is a virtue, the handmaid of charity and the helper of piety—a lesson

than which there is scarcely another which we so much need to learn in our age and country. And by economy and good management, although his salary was only six hundred dollars and never exceeded a thousand, he had a comfortable livelihood, and gradually accumulated a property which made him and his family independent of his salary. In short, Dr. Sabin might have sat for every line and almost every stroke of that charming picture of the country pastor in Goldsmith's *Deserted Village*.

A man he was to all the country dear,
 And passing rich with forty pounds a year.
 Remote from towns he ran his godly race,
 Nor e'er had changed nor wished to change his place;
 Unskillful he to fawn, or seek for power,
 By doctrines fashion'd to the varying hour;
 For other aims his heart had learnt to prize,
 More bent to raise the wretched than to rise.
 Thus to relieve the wretched was his pride,
 And e'en his failings leaned to virtue's side;
 But in his duty prompt at every call,
 He watch'd and wept, he prayed and felt for all;
 And as a bird, each fond endearment tries,
 To tempt its new-fledged offspring to the skies,
 He tried each art, reproved each dull delay,
 Allured to brighter worlds and led the way.

I have no time to analyze his character. Nor is there any need of it. There was no mystery about it, no sham and no disguise in it. He appeared to others just what he appeared to you, and he appeared to you just as he was. Always and everywhere he was the same living impersonation of good common sense, sound judgment, solid learning, orthodox faith, unwavering Christian principle and unerring practical wisdom. Without any of those brilliant qualities which dazzle the eyes of the multitude, he had that perfect

balance of faculties which commands the unchanging respect and confidence of all classes. He had too little imagination and emotion and too little action in the comprehensive sense in which Demosthenes used the word, to shine in the pulpit, or even be a popular preacher, in these days of novels, romances, magazines and sensational sermons. At the same time in all the earlier part of his ministry, no man was more acceptable in his own or more welcome in all the neighboring pulpits than Dr. Sabin. And he was always a model pastor. He was, as one of his ministerial neighbors lately expressed it, a born leader—born, educated and trained to organize forces, to plan and execute measures, to manage private and public affairs. With the love of Christ and the love of souls uppermost in his heart, such a man could not but be a model pastor. And such a pastor, who at the same time preaches sensible and instructive sermons, although without any very high order of pulpit eloquence, cannot but be a power in the parish, and impress himself in the course of a long pastorate upon every person and every thing in the community. Dr. Sabin would have made a good home secretary of one of our great national benevolent societies. He had many prime qualifications for a Secretary of the Treasury in the National Government. And I have sometimes thought it required more talent and tact, more wisdom and prudence to manage a small, poor, feeble country church, than it does to govern a State or rule over a great nation.

In the just judgment and for the most part in the fitly chosen words of another, who was his nearest ministerial brother for eleven years: "He was not brilliant as a preacher, his range of literary reading was not extensive, but his acquaintance was thorough with such subjects as he considered pertinent to his ministerial work. His treatment of

subjects assigned to him in the meetings of the Association was always satisfactory, often able. He had a logical mind and rarely took a position that he could not sustain. He rarely made mistakes of any kind, and so was always felt to be a safe adviser in matters of difficulty. If he erred at all in such matters, it was by excess of caution rather than in the opposite direction. He had in very large measure the confidence of the whole community in which he lived, a majority of whom were opposed to him in his religious views. Few minds were more evenly balanced than his, as was shown not only in his treatment of themes but as well in his whole work. He neglected none of the interests of his people but cared for them—had his eye everywhere, and thought nothing of too little importance for his notice that affected the welfare of his parish or of its individual members. Patient, careful, judicious, far-seeing, would that the leading traits of his character were more common and better appreciated than they are wont to be.”

One word more than any other contains the main secret of Dr. Sabin's character and life. He was *faithful*—faithful in every duty—faithful to every trust. He was complying and obliging just as far as he could be consistently with his sense of duty, but no further. There he stood firm and unshaken. And he was able to be so *faithful* and steadfast because he was *full of faith*. His firmness was the result of his Christian principle, his fidelity was the fruit of his strong faith. He believed the great doctrines of evangelical Christianity as the truth, the whole truth and nothing but the truth. He believed with all his heart what he preached, and what he preached he practiced more perfectly than is often done by our imperfect human nature. As there was a rare equilibrium in the balance of his faculties, so there was

a remarkable consistency and a beautiful symmetry in his character, and the priceless value of such a character is the great lesson of his life.

As his life had been tranquil, so was his end peace. About four weeks previous to his death his physician informed him that his disease was of the heart. "Then," said he, "my hold upon life is uncertain at the best, and it may be very short." Thereupon with characteristic calmness and promptness, he began at once "to set his house in order." He had a long conversation with his wife, and though she was at first overcome, his calm strength helped her to look undaunted, as he did, at the event which even then overshadowed them. He made the arrangements for the funeral service, alluded to the *lot*—a generous gift some years before of a loved parishioner—where they would lay his body, and gave directions in regard to all that would make the path easier for her who was henceforth to walk alone in her earthly pilgrimage. A day or two after this his breathing became so difficult that he could say but little. To a brother in the ministry he remarked: "I have no ecstatic views, but I know that my Redeemer liveth. I have a firm trust in the gospel I have preached to others, and there I am willing to leave it."

A friend said to him: "As you draw near to the valley of the shadow of death and feel that you are passing into it, how does it look to you?" "Oh," said he, "no shadows, *no shadows*." The last few days he was unconscious, except at short intervals, but during the days and weeks of suffering from labored breathing, not a murmur of impatience escaped him. At six o'clock, on Sunday morning, June 8th, he passed peacefully and sweetly from the dawn of the earthly Sabbath to that of a Sabbath which will know no evening. Write, Blessed are the dead which die in the Lord, yea, saith

the Spirit, *that they may rest from their labors*, AND THEIR WORKS DO FOLLOW THEM.

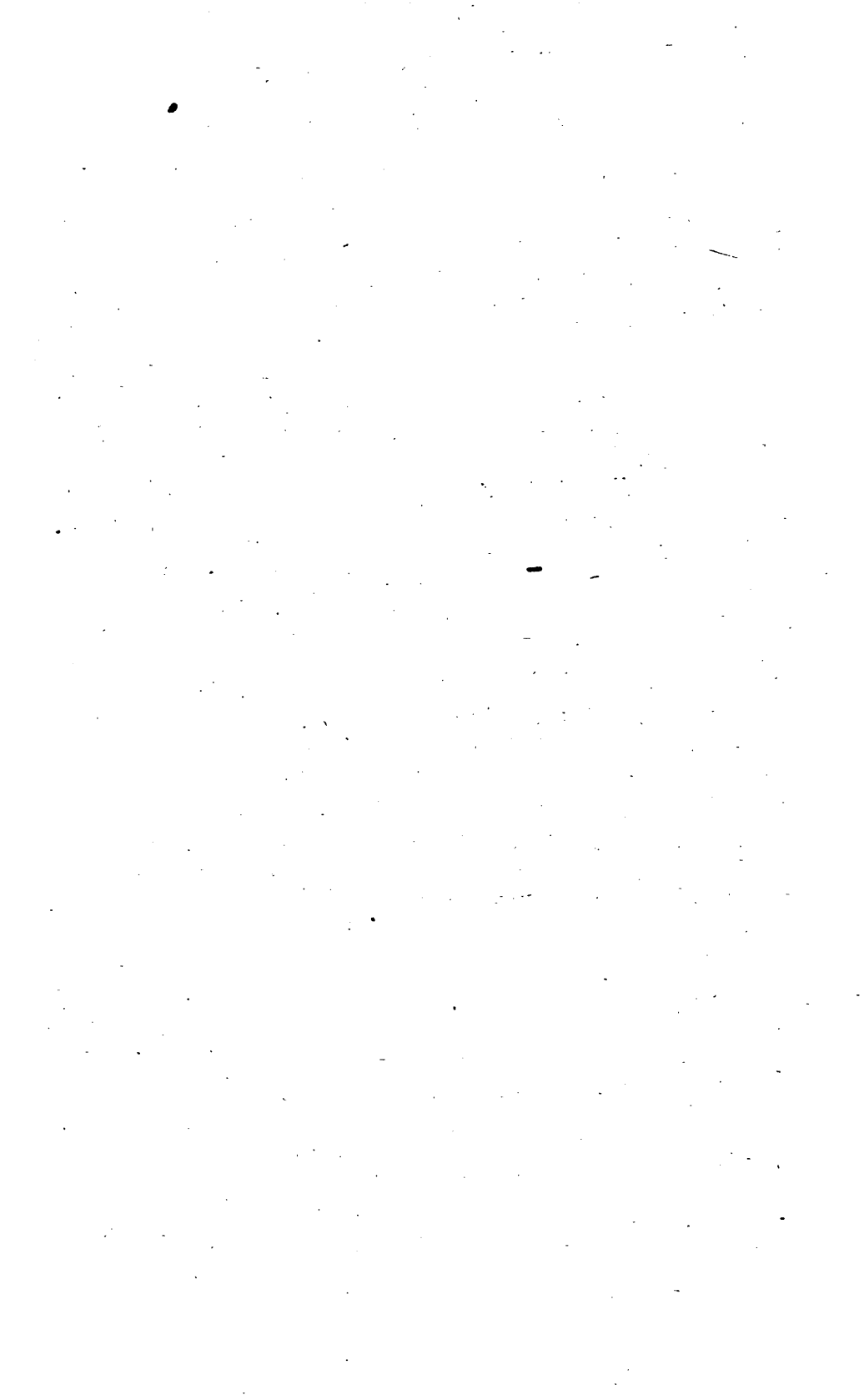
Dr. Sabin belonged to that old school of country pastors who abounded in former generations, and whom they delighted to honor, but there are few of them in our day. Who is there left to fill his place? How can his loss be repaired? In one sense his loss is quite irreparable. No one can fill the chasm which his death has created in the memory and the affections of his bereaved wife, his sorrowing father and friends, and his scarcely less afflicted people. No one else can be to them what he has been—so inwrought into the whole history of their private and public life for almost half a century. God only can make up the loss. We can sympathize with them. We can and will pray for them. But God only can comfort them under their afflictions. May she who sits alone and a widow, and yet not alone, find the blessed and holy Comforter very near her, constantly with her, and hear the same Lord and Master whom her husband loved and trusted, and who stood by him in his last hours, saying to her, Let not your heart be troubled; believe in God, believe also in me. In my father's house are many mansions: if it were not so, I would have told you. I go to prepare a place for you, and if I go and prepare a place for you, I will come again and take you to myself, that where I am and where he is, there you may be also.

May his aged father lean upon the Lord as he goes down the brief decline of so long a life, and pass through the dark valley finding *no shadows*, and assured that his son waits to welcome him on the other side. And may all the relatives see heaven nearer than ever before, because one so near and dear has gone thither before them. May the God of all grace and consolation also comfort the hearts of this people, impress the

truth which he has preached indelibly on their memories, cause the seed which he has sown to spring up even more abundantly after his death than during his life, and fulfill his strongest desires as well as your best hopes by giving you another pastor, who will serve you and the Master as faithfully, as usefully and as long as he has done. And may neighboring churches and their ministers, all of whom feel that they have lost a father, not only cry after him, like Elisha, over the translated Elijah, Our father, our father, the chariot of Israel and the horsemen thereof, but may they take up his mantle, and receiving a double portion of his spirit, enter with renewed zeal and courage on the further accomplishment of the same work, thus each in their measure filling up what is behind of the labors and sufferings of Christ. And when our work is done, may it be said of each one of us, He was a good man and full of the Holy Ghost and of faith.

UNIV. OF MICH.
FEB 23 1907

ELIHU ROOT.



AN ADDRESS

COMMEMORATIVE OF

ELIHU ROOT,

PROFESSOR OF MATHEMATICS AND NATURAL PHILOSOPHY
IN AMHERST COLLEGE.

DELIVERED BEFORE THE FACULTY AND STUDENTS, JUNE 19TH, 1881

By PROFESSOR H. HUMPHREY NEILL.

BOSTON:
JAMES H. EARLE.
1881.



THE death of a young man in the full vigor and promise of manhood is always unlooked-for. It strikes wonder as well as sorrow into the hearts of all. However large the circle in which the event is known the farthest limit feels the effect. The unexpectedness, the disappointment, the regret, the mystery of such a death touch even the casual beholder into silence. If the world knew the fact, the world would be mourners. But we are separated from the world, and by some intimate knowledge of the abundant prophecy of the life that has gone out, of its rare though incomplete accomplishment, of its potent inspiration, are brought through our greater sorrow into closer sympathy and into deeper appreciation of the memory that remains.

To this circle of acquaintanceship I am permitted to address myself to-day. We not only knew Professor Root well and admired and loved him much, but we know each other well and are awakened to a similarity of sympathy and sorrow which is exceeded only by that which exists in the intimacy of the family circle. I cannot, therefore, exhibit,

as if to strangers, the elements which constituted the character we all have honored, nor express, as if to those who knew him not, the sense of our loss. I must, as well as I can, recall in words some traits which we have all silently felt, and which, in some of us, are working to the enrichment of our lives. I must only talk of him with you in such a way that we may, perhaps, fix more deeply and appreciate more clearly that in him which made him what he was. I may, therefore, allow myself to honor him as one who loved him rather than represent him to those who knew him not.

It is always well-nigh impossible correctly to analyze a human life. The nature of the elements that compose it, the relation of motives to action, of that which is concealed to that which is revealed, and the inscrutable character of the soul-force which organizes and vitalizes all these elements alike elude at every test our imperfect discrimination and the bungling machinery of our logic. It seemed at first that it would not be difficult to express the idea of Professor Root's life and to detect the secret of his power, but when I apply myself to the task not one element but many appear prominent and in the light of memory,

"Every lovely organ of his life
Comes apparelled in more precious habit,
More moving-delicate, and full of life,
Into the eye and prospect of the soul,
Than when he lived indeed."

From September 14th, 1845, to December 3rd, 1880, thirty-five years, two months and nineteen days can be counted, only time enough to discern the promise of this shortened life. We see but beginnings, yet some of these are too significant to allow us to mistake their meaning, and too important to be overlooked. There are also certain influences moulding his life which can be traced with a good degree of certainty.

Born of Puritan ancestry, he was nurtured in a home of simple habits and godly living. The unusual affection of this household expressed itself in rare devotion of deeds and in common self-denial and helpfulness, which made that home still unbroken when sons and daughters turning their steps from its threshold took nothing of their hearts away. The influence of this home-life was evident. Though the interests of Mr. Root's life-work were in the college, though many of his most treasured friendships were formed among us after he became a teacher, though he was settled in Amherst he never thought of it as his home. Very seldom did he allow the absorbing duties of his department to interrupt his fortnightly visits to his father's house. Into whatever channels of thought his foreign residence and his private studies may have tempted his intellect, the mark which this early education made upon his character was never effaced. A promise made to his mother was regarded by him as inviolate, and the open Bible lying upon his table during the few days of sickness in Amherst reminded those who knew his history that the reading of the daily portion which she had requested from him was never discontinued. Honor for his parents, brotherly affection and pride increased with all the advancement of this gifted man. It is to this inheritance and early culture that we ascribe his deep and fervent religious nature.

In December, 1860, he became a student at Williston Seminary, Easthampton, joining the class that was graduated in 1863. Immediately he took the position as a scholar which he ever afterwards maintained. At his graduation the Commencement programme presented his name and four others as being of equal rank and the highest in the class, while the Salutatory was assigned to him. It was during his life there that he determined publicly to declare himself a Christian man. Though he was to be graduated in June, and

though he expected afterward to enter college and thus be for years, probably for life, away from his home, yet with characteristic attachment to all the surroundings of that home, he went, in April, from Easthampton to Belchertown and united with the church of his father and his youth. The qualities of heart which were always conspicuous in him were recognized by the boys at Easthampton so that one of his classmates says, "He was the best loved man in all our little class."

From Williston Seminary he came directly to Amherst and took the Porter Prize, given to the candidate who passes the best examination for admission to the Freshman class. This excellence of preparation was not one of mechanical acquirement to be lost when the college studies were undertaken, and, as was to be expected, he spoke the Valedictory oration at his graduation, July 11th, 1867. It so happened that when his class went into their first recitation Mr. Root was the first called on to recite; it also fell to him to speak the last words before that class in his Valedictory, and during all the years between, his position as its first scholar was steadily held. Though prominent in all departments of study, his mathematical prize, taken Sophomore year and the prize in natural philosophy, taken at the end of Junior year, show that from the beginning he manifested a special aptitude for that line of study to which he afterward devoted himself. His prominence in the college was largely evinced, I think, in the class-room. His absorption in study, his natural modesty, and a distrust of his own powers together with a want of that easy flow of language which more shallow natures often possess made his circle of intimate friends limited and kept him only casually known to the greater number of those who were in college. Indeed he was never what would be called a talker. A perfect acquaintance with his subject or a deep conviction of its importance was nec-

essary to let loose his thought and then he spoke with an intensity and force that burned his words into the memory and conviction of those who heard him.

After his graduation he spent two years as instructor at Williston Seminary, one year at Andover Theological Seminary, one year as tutor at Amherst and then in the summer of 1871, determined to study in Germany. Sailing in August, he spent the first six months at the University of Göttingen and the second half-year at Leipsic, whence he removed the next year to the University of Berlin. There under Professor Helmholtz he applied himself to the study which he had at last chosen with an assiduity, a patience and enthusiasm of which few men are capable.

The period which has been so briefly reviewed was important in the life of Mr. Root. From the time he took his degree of A.B. to the time he came under the influence of Professor Lotze at Göttingen, his career to human eyes was not successful. I am sure it was not happy. He was following a conviction of duty in opposition to the yet unrecognized aptitudes of his nature and to the organization of his intellect. He was following this conviction with a heroic determination which would have led him into the wrong profession had not his eyes been opened. He was following this conviction with a loyalty to truth and God which would have sustained him in his choice even amid the trials and regrets which must have come, but would never have given him the success which even his short life achieved in a different path. This conviction was that he ought to be a minister of the Gospel. He formed this purpose out of the most central and abiding impulse of his nature, the desire to find the truth about God and to teach it to men. This desire was growing during all his college course. The question after graduation was: "What profession will most directly and certainly accomplish this purpose?" There

seemed to be but one answer, "The profession of theology." Yet unconsciously there was a struggle between his choice in the light of judgment and the whole trend of his nature. With one to whom the imperative of duty was less supreme, the reason for this unrest might have sooner appeared and the remedy might have been found. But with him when the voice of duty spoke all others were neglected. So, during three years he undertook teaching with a view of disciplining himself for the ministry. He entered the Theological Seminary at Andover, and at the end of the first year was ready to leave and accept a tutorship at Amherst. Still he did not give up his idea of becoming a preacher. His letters show no deep enthusiasm for the calling in itself. Indeed, they speak most of his fear of failure, but not a word about giving up.

While at Andover he prepared a report on Foreign Missions to be read before the students and faculty, and of this report he says: "If I succeed I shall take courage, and if I fail I shall begin at the bottom of the ladder and work up." This was the spirit in which he labored and suffered, hardly daring to hope. The year at Amherst added to his discomfort. His department was not one suited to his taste, and he did not feel fitted for his position; for, with him, to be fitted to teach, was to be master of his subject in its depth and breadth that he might impart from the fulness of his knowledge. So he became depressed, even his friends saw little of him. He was at a stand-still. He was not even aware of the strong tendency of his genius. That thought that he must be a minister had been so large in his consciousness and expressed to his conscience in such terms of duty that the apprehension of his special powers had not fully awakened. Just at this time a friend* suggested that they go together to Germany, where he could pursue his studies

*Professor J. W. Burgess of Columbia Law School, New York City.

in philosophy and theology and let the future develop itself. It was the best thing that had come to his thought. It proved to be the best thing that could have come to his life. Thus he went to Göttingen, and there, under Professor Lotze his life's course was changed.

It would be short-sighted indeed to say that this period of waiting and of unsatisfactory work had not its use in the life of Mr. Root, and yet so far as his distinctively professional career is concerned, its effect is not visible. The steps he was then taking did not directly lead up to the study of physics. So little was this true that he recognized it himself, and after he had left Göttingen and had begun the study of natural philosophy at Berlin, we find him estimating the value of this apparently useless period with a playfulness characteristic of his childlike disposition. He says, in a letter written to his home: "I am learning here to prize an organic development. Following the examples of the Germans I could *prove* to you such a development in my education thus far, whether there *were* such a reality or not. I could show you how Lotze, logic, metaphysics, theology, elocution, gymnastics, French, German, history, and Tennyson are but the diverse rocks upon which a wise man, having counted the cost, is to erect a house which would stand the storm, but we are living in an age of skepticism and I forbear." He could play with the past, since the future was now clearing.

There is much, however, that is significant in these years of hibernating, almost aimless and unimportant as they appear. They undoubtedly strengthened his capacity for patience, and his willingness to make his preparation quite complete before he undertook his public duties. Certainly his religious life during this time grew in the singleness of its purpose and in the trustfulness of its piety. His letters to his home breathe this spirit in many of their words, which are too confidential to be largely quoted even in such a place as

this. One expression, however, will reveal the whole. He says: "To strive to grow together in the Lord is a grand purpose. I yearn to feel sure that I can say with the good Dr. Tholuck: 'I have but one passion, and it is He and only He.'" Such was his hidden life.

And if there was such living amid circumstances which men would have thought unfavorable and in a path which they would have called mistaken; if this interior life, unknown to the world, was so enriching him as to endow him with that power of inspiration which he exhibited among us, shall we say that those years were wasted or unfruitful? Shall we say that any part of life whose meaning is not on the surface, is therefore meaningless? And must we not suppose that death itself will reveal to our unveiled eyes the secret of its own meaning, its purpose for the soul-life which it frees?

As we have intimated, Professor Lotze was the one to whose influence Mr. Root's choice of a profession was due. This choice was not made immediately on his arrival in Germany, for we find him writing from Göttingen soon after he had fixed his residence there: "I do not find any temptation to change my purpose to become a minister, but I do find the strongest temptation to narrow more and more the scope of my study, that is, to dive deeper for the truths of life."

In this temper he gave himself up to the study of philosophy. As usual, he made earnest work of it, attending all Professor Lotze's lectures, and reading his great work, "The Microcosmos," day and night. As one* says who knew both teacher and pupil at this time: "Professor Lotze was a man with whom Mr. Root could sympathize most deeply in character of mind and soul, for he combined an intellect of rare scientific accuracy and thoroughness with an extraordinary depth of religious feeling. From this philosopher he received

* Professor Burgess

a most full and rapid development of his special genius. It was Professor Lotze and not Professor Helmholtz who gave the direction to Mr. Root's life. Professor Helmholtz only knew him after the decision had been fully and finally made and gave him his special and scientific training. Professor Lotze on the other hand taught him to contemplate the whole universe of matter in its relation to spirit as the ultimate aim of all true science. But for this spiritualization of natural science Mr. Root would never have been drawn away from theology."

The training and character of Professor Lotze were such as to attract him, and the philosophy of the Göttingen lecturer both satisfied the demand of his intellect and met the want of his heart. He had just come from America where men were trying to reconcile science and religion in discussions which seemed to imply an antagonism between them,—the defenders of religion being often little accustomed to methods of scientific thought, and the defenders of science intimating that their thinking must stop short of God. In the German philosopher he found one who had studied phenomena of matter with accuracy and patience, and who asserted that the knowledge of natural science was necessary to the philosopher. With his love for strictly scientific pursuits and skill in scientific methods Professor Lotze associated an intellect poetical in its ideality and a spiritual nature which forced him to recognize a world lying beyond that which is the all of science. In the very preface to his "Microcosmos," he says: "The strife between the sense world and the supersensible is unnecessary misery which we bring upon ourselves by stopping short in our researches." Matter and spirit, body and mind, the known and the knowing are, according to him, neither antagonistic nor identical; but, existing together and giving occasion for action and interaction, they find their ultimate explanation in Him who is the supreme end of all things.

Thus the man with his twofold capacity, and the philosophy which incorporated in the speculations of the metaphysician the work of the scientist, obtained easy mastery over the best that there was in both sides of Mr. Root's nature.

But it was not this that most deeply influenced him. The system of Professor Lotze is controlled throughout by a distinctively ethical motive. As Dr. Erdmann says: * "The world of worths (goods) is the key to the world of forms." The conception of being is not complete till both the mechanical and the ideal are investigated in their relations and interactions. The laws of matter, therefore, contribute largely toward the knowledge of The Good in which their true reality is expressed. Existing together, the mechanical and the ideal find the reason for their being and their essential reality in a Personal God. It was this dignifying of physical laws as a revelation of God, so necessary that without a knowledge of these laws He could not be adequately comprehended, that first induced Mr. Root to think that his early purpose might be entirely accomplished in the study and teaching of physics. Once convinced of this, then his exact and mathematical mind, in all the intensity of its action, entertained the idea that, for him, original investigation of physical law was the most unincumbered channel to the mind of God. Then the incubus was lifted from his conscience, and his choice of a profession began to grow clear. Yet it must be kept distinctly in mind that he was only turned from theology by discovering that his purpose in preaching could, by him, be better accomplished in teaching physics. His aim to know the truth about God and to teach it to men had not changed a whit. He deliberated carefully before he declared that he had abandoned his attempt to become a minister. Not at Göttingen did he make up his mind. He waited till six months of study at Leipsic had further set-

* Translated by Dr. Ueberweg in his History of Philosophy.

tled him in his new-found course and then made his way to Berlin with more lightness of spirit and impulse of ambition than had come to him for years. He had found his calling. It was his election.

The details of his life at Berlin are such as you would have expected them to be. On account of his excellent physique he was, at times, able to work fourteen hours a day and not feel tired. He heard Professor Helmholtz's lectures twice over till there was no student in the university who had mastered them so completely or could follow the rapid demonstrations of the professor so closely and accurately. At this university Mr. Root received a thorough furnishing for the work of his life. He always regarded Professor Helmholtz with reverence and spoke of him with honor. Though so thoroughly in earnest in his scientific studies that after coming home from his laboratory late in the afternoon, he would study till nearly midnight, forgetting that he had not taken food, yet he found time to conduct a Bible-class in the American Chapel and to attach himself to many whom he aided by nursing in sickness, and by kindness in health. The letters from those who knew him best at Berlin, speak more often of the unselfishness of his life than even of its studiousness. I shall have occasion to speak again of some of the events during his Berlin residence. In three years he took the degree of Ph. D., *cum laude*, and immediately set sail for home and for Amherst.

Arriving at Belchertown, March 5th, 1876, he shortly after began his work among us as Assistant Professor of Mathematics and Natural Philosophy. In September of the same year Professor Snell, the honored head of the department, died, and at their next meeting the Trustees elected Mr. Root to take entire charge of the department of Physics. The details of his short life here we all know and its spirit can best be exhibited in speaking of the general and prominent traits of his character.

IN attempting to give some general impression of Professor Root, I instinctively remember him in three ways : in his physical nature ; in his mental training and gifts ; and in his qualities of heart. In each of these there was in him a remarkable development and perfection. We can never recall him without beholding before us that well-proportioned, square-shouldered, firmly-knit frame. Erect and alert in bearing, every motion gave evidence of well-trained muscles vitalized by a nerve force, intense and vigorous. His pedestrian feats, his prominence in the gymnasium, his eager and successful participation in athletic sports, his unusual endurance, both of mental and bodily activity, displayed a physical constitution well endowed and well in hand. "He was especially proud of the strength of his lungs," writes his room-mate* in Berlin, "as shown by their power of expansion and by the exertion he could make in running rapidly upstairs without increasing the rapidity of his breathing." His face often glowing with the color of boyish healthfulness, seldom showed traces of his assiduous and long-continued work.

If after his years of study his mind had shown the need of rest we should not have been amazed. If studious absorption had rendered his deeds of hearty kindness less conspicuous, we should only have recognized the usual tendency of isolated and confining devotion to books and not have been surprised. But that the flaw should be found in

*A R. Ledoux, Ph. D., New York City.

that splendid body and that disease should have seized with its sudden and fatal grasp the proud fortress of his strength, struck us dumb with wonder and with awe. Truly, O Lord, Thy ways are in the untrodden paths of the fathomless sea !

The word that expresses his mental gifts is genius. Not that genius that consists in facility of phrase, nor in the light that makes words live ; not the power of quick adaptability to varied circumstances ; not that of ready assimilation with his kind. It was a genius for the science that he loved. Here he disclosed all those powers of intuition, comprehension, patience, perseverance and enthusiasm which are but the various manifestations of this original gift, this heaven-endowed capacity for the work he accomplished.

It falls neither within my power nor my purpose to distinguish critically the precise character of his special gift, though none can be ignorant of its eminence. Even, however, from the standpoint of an unskilled observer, it is evident that mathematical statements which required demonstration to others seemed axiomatic to him. He saw through problems which must be solved by most with more gradual processes. His true mathematical genius, put into the form of equations, realities unapprehended by the senses, and the formula appealed to him not as a combination of symbols, but as the fit expression of a law most clearly discerned. As one reads in his native tongue shades of thought which foreigners rarely perceive, so in this algebraic notation he read, as if by intuition, profound relations of principles and far-reaching realities which none could discern who did not know as well as he the language in which they were told. It was this that made him, in his early teaching, advance more rapidly than his classes could easily follow. Unconscious of the superiority of his own endowments he could not immediately allow for the wants of others. When he

perceived such deficiency no one could be more earnest than he in giving time and attention to any who wished to learn. He was almost prodigal of himself in his readiness to give personal instruction to students who had not comprehended the teaching of the class-room. The abstracts of his lectures, which he printed every year for his classes, show from year to year an increasing ability to adapt the subject to minds more immature and less gifted than his own. They are simpler in expression, more confined in their scope, less dependent upon purely mathematical explanation and fuller of every-day illustration. If, in his few years of instruction, he had not become as eminent as a teacher as he was as a scientist, he was on the high road even to that position. If, in his experimental lectures before the class, he seemed to lack perfect manipulation and sometimes failed in an experiment, it arose, partly from the higher value he placed upon the mathematical proof of a principle as compared with its illustration in one visible example, but partly also from a nervous sensitiveness which made him fail to do in public what he easily accomplished when alone. He seems, also, to have lacked somewhat that artistic capacity which produces perfection in the details of mechanical workmanship, and thus for youthful and popular audiences his success as a lecturer was not complete. This, however, must not be taken as an evidence of incomplete equipment for scientific work. If he could not have tested his mathematical results by exact and accurate experiments he might have been an eminent mathematician but not a prominent scientist. Not only was he an excellent experimenter in original investigation, but his thesis for the Degree of Ph. D. shows that he possessed remarkable inventive power in preparing new apparatus for such investigation. Professor Helmholtz, in a letter written since Professor Root's death, expressly says :

"He was a man of rare genius, which included great theoretical insight with great skill in carrying out his ideas experimentally. He was able to solve for himself mathematical problems, and possessed that which, to most young physicists, is much more difficult, the power to translate the mathematical conceptions into the world of fact."

But underlying all these special scientific endowments was that, which is even more important and, in him, was more prominent, the true scientific spirit. He often said that he desired to teach his students scientific methods of thought rather than a large number of disconnected scientific facts. His study of logic as well as of mathematics and physics made the method of thinking and the true point of view to be obtained the all-important objects of his teaching. It was this spirit that inclined him to avoid introducing to his students the speculations of science and to leave almost untouched those questions which lie on the border between the sensible and the super-sensible world. Once teach the student how to observe and how to think, was his principle, and he then has the power to test such speculations himself; otherwise they will perplex him or mislead him in thought. His theory of the two worlds of spirit and matter, obtained largely from Lotze, made him contented and courageous in approaching physical problems wholly from the physical side, knowing that the "worth" of the problem when solved would consist in its revelation of God. Thus, logically the most important, as well as the most remarkable, lecture of his general course was the last one, in which for the first time he showed that physical phenomena could be viewed from a standpoint which would exhibit them, not as connected links in an unending series, but as a unity in the thoughts of God. This "hour with God," as one of his pupils called it, was the ripe and legitimate culmination of his studies as a scientist.

It is not always true that comprehensiveness accompanies scientific aptitude, but Professor Root possessed this trait. His grasp of his subject was complete. It is interesting to notice the respect in which his lectures changed from year to year and the respect in which they remained the same. Every year he re-wrote the abstracts of these lectures without the previous lectures before him, and yet the plan which he developed the first year was not materially altered. The scheme was, from the first, complete in its scope, and nice in its relation of parts. He was ripe in the comprehension of his study before he had ever written a lecture. The modification consisted in confining them more and more to elementary principles and relieving them of abstract calculations. We might have expected him to be fully furnished in that special branch of his subject in which he had made original investigation, but his matured knowledge of the whole science shows not only the quality but the reach of his genius.

Scientific genius is impossible without indefatigable patience. A casual observer might have thought Professor Root wanting in this. His rapid speech, his nervous motions, his face quickly changing and glowing at an interruption, his forgetfulness of matters not connected with the subject upon which his thoughts were fixed might, to some, have denoted a want of patience. But once at his work, the persevering patience of one who searches for secrets which ages have hidden was his. This trait was remarkably illustrated in the laboratory at Berlin. I take the account from the pen of his room mate.* "He required for certain purposes a battery of very strong 'potential,' needing a large number of cells. He started at the beginning of his vacation to make such a battery of ten thousand cells. His method of proceeding was ingenious. He purchased two tall chests of

*Dr. Ledoux.

drawers, each drawer about four inches in depth, each case containing about twenty drawers. These he filled with paraffine, in which holes were bored, and in each hole a glass test-tube was carefully placed. In each test-tube was placed a strip of zinc and a strip of copper, the strips kept from contact by means of cotton skilfully inserted between them. Each little cell of the ten thousand had to be connected with the others, and filled with the exciting fluid. He had given six weeks of his summer vacation to the preparation of this battery, and on a certain day was to try it, and the day after to start for an excursion among the Hartz mountains. His valise was already packed for the trip. Going together to the laboratory, we found one of the assistants examining the connections to see how they were made. He had pulled out from each case a number of drawers, beginning at the top and had failed to close them. Just as we entered the weight of the paraffine and some sudden jar caused both cases to fall to the floor. The hard work of six weeks was a mass of ruins. Mr. Root said not a word, but that very day quietly began the reconstruction of his battery, melting the paraffine, straining out from it the broken glass and starting at the very beginning. He finished the second battery just in time for the opening of the next Semester." Nor is this an exceptional instance of his patience. It is simply typical.

Of course he had enthusiasm. Success is not possible without it. The science had chosen him and possessed him. He lived as its servant with every active and trained power surrendered to the service. His zeal was intense, because set on fire by the genius of his nature. No obstacle ever thwarted him—so that Professor Helmholtz says: "He did not rest as long as there appeared to be any possible means of discovering a way which might lead to perfect results."

Thus endowed and thus ready for the finest work, appalled by no amount of labor, and impatient of nothing but defeat,

how is it possible to estimate the loss that science has sustained in his death !

And yet if you should ask the students who could best appreciate the excellence of his scientific acquirements ; if you should ask any of those who were associated with him as teacher and friends, what in him impressed them most deeply while he lived, and lingers now most prominently in their memory, I am sure they would answer, " Not his gifts of genius, but the power and worth of his character."

That character was rooted deeply and firmly in conscientiousness. The power of the right, the might of duty was the force that interpenetrated all his life. To us who could not see the hidden temptations in his heart it hardly seemed as if it occurred to him to turn away from this voice of God. If there is a gift or grace of simple rightness bestowed upon mankind, I think he possessed it. In the second century he might have been a martyr, in the seventeenth he would have been a Puritan, in the nineteenth he was a man of modest, unconventional, determined righteousness. He was too down-right to be politic. His confidence that others were as true as himself made him entirely frank. When you had once broken through a modest reserve you obtained the truth just as it appeared to him, because of a royal conviction that the truth was not simply harmless but helpful and victorious. This frankness was not devoid of a certain bluntness and a tendency to unmodified statement which in times of excitement seemed almost combative, but no one who ever met him failed to feel his entire lack of malice or of personal animosity. Few men could hold views of life as pertinaciously as he did and at the same time give such respect and credit to opposite opinions. Such earnestness and pertinacity are the germs of fanaticism as well as the seeds of heroic self-sacrifice. When you add to these a remorseless adherence to logical conclusions you have potent factors for the construction of

a bigoted and obstinate nature. These possibilities were all in Professor Root, but they never so much as germinated; for a charity broadened by contact with men of many minds, quickened by the discovery of truth in more than one line of thought, and enriched by a moral intuition that detected an essential unity beneath many differing forms, nurtured in him a respect for every earnest man. Not only could he bear with those who differed from him but such difference never lessened a friendship or weakened an attachment. His relations to his friends were dictated by his heart, which was quick to detect when that of his fellow was in the right place. In all his kindly regard for others it was out of his heart that his mouth spoke. It was this alertness to discover the real character in every one and this readiness to accept everybody at his best that made for him, as he grew older, so large a number of enthusiastic friends. No one ever thought of being misconstrued or severely estimated by him.

And this charity was made more attractive by an unselfishness no less marked and constant than his adherence to duty. It made him a gentleman after the law of an inward courtesy. It was expressed in his desire for the welfare of students in all their development and not alone in his wish for their proficiency in his department. It was seen in the embrace of his plans which included the entire idea of a collegiate education. But within the door that hides the sacred secrets of his home it was most conspicuous and endearing. Yet it is impossible to speak much of this. It was so unconscious and habitual that he could not be aware of its charm. It seemed so much a natural part of him that we did not stop in our enjoyment of it to name it as a virtue. To attempt to laud it would be to destroy the blush of its beauty.

Perhaps the crowning natural characteristic of Professor Root was his guilelessness. It was like a sunset light in

which all other traits were harmonized and each touched with a peculiar lustre. In his simple-heartedness he was especially fond of children, and they delighted in him. He often acted upon an impulse and spoke in excitement, but few men, I think, could better trust themselves to follow the impulses of their nature. It was this guilelessness together with his earnestness that made wit unnatural to him, though with childlike abandon he entered into fun and sport. It was this that would almost induce one to write over him the words the Master used of Nathanael, "In whom is no guile."

I have succeeded but poorly if I have not made it appear that his religion was the permeating influence of his whole life. He could not have been what he was without this. It governed every action, and at each crisis in his life it determined his choice. He first chose the ministry from a religious impulse, and from an impulse no less religious he afterward elected science. Distinguishing carefully between the religious and the scientific faculty he often expressed his confidence in the faith of the heart in those lines of Tennyson:

"If e'er, when faith had fall'n asleep,
I heard a voice, 'Believe no more,'
And heard an ever-breaking shore
That tumbled in the Godless deep;

A warmth within the breast would melt
The freezing reason's colder part,
And like a man in wrath the heart
Stood up and answered, 'I have felt.'"

It was this opening of his heart toward God and this reception of Him by faith, together with a supreme confidence in the ground of that faith that held him established against rationalism on the one side and materialism on the other. He speaks thus, in a Fourth of July oration delivered at his home after his return from Germany: "Puritan

faith is said to be dying out in America. I cannot believe it. Puritan bigotry must give way, and rightly, before the spirit of truth; but Puritan faith, most certainly the crowning glory of individual manhood, is and must be the life of the American people." This faith in his father's God he held as his choice possession, more certain than all his knowledge, more fruitful for human life than all the tangible results of his science.

Not largely developed on the æsthetic side of his nature, except in his enjoyment of music, he had little regard for forms of any kind, and was not strongly attached to associations because of their antiquity. Externals were of little consequence to him, either as expressions of thought, as vehicles for devotion, or as dogmas of theology, provided he lost nothing of the thought in the change of the expression, and held fast to his faith in the translation of the dogma.

But his religious faith was more than a defence. It was the secret of his character and the regulator of his life. Communion with God was his comfort as well as his strength. Many men say prayers. He was entirely dependent upon prayer. Spirit was to him a reality, God the highest certainty in the universe. In devotional services he found peculiar pleasure. How well some of us remember his enjoyment of hymns and the reverent absorption with which he sang them. A few of his favorites reveal much of the complexion of his inward life. "My Jesus, as thou wilt!" was often selected by him and was on his lips during his sickness. "Father, hear the prayer we offer!" was also repeated by him during his last days; while "It is not death to die," "O, deem not they are blest alone," and "Come unto me when the shadows darkly gather," were equally cherished by him as an expression of his religious feeling. A few days before the end actually came, he thought he was dying, and in that hour his heart found utterance in those words of the poet he most admired and loved:

“Strong Son of God, immortal Love,
Whom we, that have not seen thy face,
By faith, and faith alone, embrace,
Believing where we cannot prove;”—

and the hymn seemed the address of his own soul.

This man had lived to investigate the thought of God in nature, his heart had responded to His spiritual presence, his powers had been devoted to His service, the early yearning for the passion that should be God and only God had in some degree been met, and these hymns of prayer and faith were but the natural voicing of his spirit, as resignedly and peacefully he met his death, December 3rd, 1880.

To have been brought into daily association with such a man ; to have been permitted to see the working of such an intellect ; to have come into contact with the inspiring and elevating influence of such a nature has already lifted us to higher endeavor and more devoted living. The lesson of his life was taught in its living. To have known him is an honor, to have loved him an inspiration.

Professor Root while at Berlin wrote and preached his only sermon. His text is striking and impressive as we read it here in the shadow of our sorrow : “Then shall the dust return to the earth as it was and the spirit shall return to God who gave it.” It comes to us as a declaration of his faith in immortality, of his belief that life is not cut short by death, but that death is the beginning of a larger and freer activity than in the body we can know. And for us, for science, for the world, what is there to do, but to wait in the same faith, “believing where we cannot prove,” and expectantly trusting that when we too shall be clothed upon with our house which is from Heaven, we shall then know what we now believe, that what seems only loss is infinite gain?

UNIV. OF MICH.
FEB 28 1907

Credo

John E. Tuttle, D. D.

Statement of Belief


BY

REV. JOHN E. TUTTLE, D.D.,

AT HIS

INSTALLATION AS PASTOR OF THE CHURCH OF
CHRIST, IN AMHERST COLLEGE,
NOVEMBER 17, 1893.

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1893.



This outline of belief is published at the request of many who feel that it may be helpful to some who love the Saviour, and of interest to the friends of Amherst College.





The Bible is the greatest fact in the world. It is a fact which a thoughtful man can neither escape nor ignore. The Bible is. As an honest man I must know its contents and account for its existence. I open it.

Its first words unveil Omnipotence. "In the beginning God." The cloud clothed Being toward whom untaught man, now with trembling heart, again in hope, has in every age and land stretched forth helpless hands of longing, whose voice the savage hears in the tempest, whose face the kneeling woman sees in the dawning sun, is a reality. The universal heart does not mislead itself.

God is. This the writers of the Scriptures assume as a fact. They anticipate the words of one in our own day,—“Belief in God is a postulate of our whole rational and moral nature. All proofs together can and ought only to serve to explain and confirm that which, before all proof, lived and expressed itself in every human heart.” Unlike Philo, the Bible describes God not as pure being, without attributes, nor, with Plato, as without essence or existence, but as a Person, knowable and lovable, loving and holy, in the sweep of His infinite being including all good and excluding all imperfection, with touch almighty to create and hand almighty to uphold, all seeing and all wise, the fountain of all life, without beginning or end, neither apart from the world nor identified with it, embracing in Himself three persons,—Father, Son, and Holy Ghost, each God, each blessed forever,—a mystery left veiled by Scripture, “a mys-

tery," Melancthon says, "better revered than inquired into."

But I would know more than this,—that God is. Religion is communion. The true religion must make possible the full communion of my heart with God. I cannot make this possible. I seek Him in the Spirit within and the world without. But "the things that are made" give only clouded visions of "the invisible things of Him." This threefold God must unveil Himself. Revelation must be more special, spiritual, condescending. I cannot mount to Him. He must descend to me. He must enter my human life, so that I can feel His heart beat against my own, and hear His voice above the tumult of the world, and in life's perplexing paths touch His hand, and in the darkness see His face. If God is Father, I need that Father on earth. What says the Bible to me now?

In language simple yet sublime, it tells

of man's longing after God and that, when longing had become heart breaking, He came in Jesus Christ, the God-Man, in whom, under human limitations, we see all that God is. This completeness of the divine unfolding, Scripture pictures as bursting on the world not at once in full beauty, but, as men could comprehend and receive it, in slow development in history. "It began with one nation, a people on a low plane of intellectual and moral life, to whose undeveloped intellect and morality its teachings were largely adapted." Through a long line of chosen men it progressed to find, after many ages of slow learning and patient teaching, its culmination in Him in whom is manifested all the fullness of the Godhead bodily.

Of this progressive revelation of God, in its idea a miracle, we might anticipate that many signs and wonders should be a part. These, the Bible tells us, were not wanting.

The Old Testament relates that in their ignorance men needed and were given supernatural evidence of God's presence and power, while the New describes many miracles wrought as aids to faith, that those slow of heart to believe might have proof of Christ's divinity and of the authority of His message.

Before I looked into this Bible I knew that some things were right and others wrong. I heard a voice within me saying, "Do the right." I knew I ought to do the right and that I was guilty if I did what I thought was wrong. My sense of justice told me, too, that I could not be blamed if I was compelled to do wrong. My consciousness of guilt was proof of my entire freedom to choose the right and not the wrong. Sometimes, I felt impelled to do right; again, strangely inclined to do what I despised. In it all was much which troubled me, much that was dark and

strange. One thing was clear. I need not do wrong. I was guilty if I did. My responsibility could not be shifted to the shoulders of another, and my wrong made wrong easier for others. In this Book of God, I am told there is right and wrong. It makes the distinction sharper, more fearful than I saw it. It calls the wrong, Sin,—a name, at once, too awful, too profound for human thought to measure. Here I find the explanation of conflicting motives. I read that man was created holy, in the image of his God. He had never done a wrong. In his heart was no hunger for sin. In the unhindered exercise of his free choice, he chose to gratify himself rather than to please God. This Book tells me God is holy. His supreme righteousness shines all through the revelation. He must hate all sin; and, so, by this one sin, a gulf is cut between God and His child. God is the same but man is not. He has

wronged the Father and in wronging Him has dishonored himself. Henceforth, in all his life, in the lives of all his posterity will be the taint of sin. Now I know why I am so strangely drawn to do the wrong. The Bible tells me that I come in as an heir of the family appetite for evil. Not responsible for the sin of that far away ancestor of mine, somehow I feel the need of cleansing for even my inherited proneness to sin. I sin. I read that God must punish all sin, that everyone must meet the full consequences of the least violation of divine law. What can I do? What can sinning men do? The Bible speaks. "God so loved the world, that He gave His only begotten Son, that whosoever believeth on Him should not perish, but have everlasting life." Reading on, I find He has, indeed, come to reveal the atoning love of divine fatherhood, come to suffer for every sinner, and that I, accepting His sacrifice as for

me and beseeching God to pardon me for His sake, shall be forgiven and in God's sight be as though I had never sinned. All this atoning work of Christ the Bible does not put for me in one definite expression ; nor has the theologian out done the sacred writers. All statements of the atonement contain truth, but all are and must ever be less than the Truth. The atoning work of Christ, as given in the Bible, is wider than the stretch of human intellect. It is limitless and fathomless as the love of God. In His love, I read, it originates. Of His love, it is at once proof and personification. In our guilt is its necessity. Its central fact is His incarnation, in the completeness of its humiliation from the manger to the cross. His death is the ground of our forgiveness and His death is for every soul. It is limited only in man's refusal, never in God's invitation. Everyone who believes in Him as his Redeemer will receive full

pardon and eternal life. The atoning work of Christ, in its wide sense, I find to be the heart of the Scriptures. The Old Testament moves toward the Cross, the New Testament from it. Jesus is portrayed, first of all, neither as a perfect Example nor an unsurpassed Teacher but as the Redeemer, whose mission is to seek and save the lost, whose sacrifice in life and death cancels the debt of sin and opens to a dying world the doors of life and peace. The fearful nature of sin; its personal character; every soul guilty and responsible to God for his sin; all indifference to God and His law, sin; the best moral life wrong in its very principle; Christ dying for every soul; pardon now for all who believe; a godly life reached only by a definite change of life purpose; the sinner must fully and openly accept Christ as his Redeemer and Lord;—in short, personal sin and personal justification by faith in

His cleansing blood is the soul of the New Testament message, whether voiced in Gospel or Epistle.

And now, when by faith in my Redeemer's blood, I stand forgiven in the sight of God, the Bible tells me I am only on the threshold of a new life. The gladness and peace now mine by consciousness of pardon is but the foregleam of deeper joy in Christ; my knowledge of my Redeemer and His Gospel but an acquaintance that may ripen into perfect intimacy. I am told to be in the world but not of it; to grow in grace; that I can keep my new likeness to Christ only by becoming more like Him. Everywhere I read of larger work to do, greater battles to fight, grander victories to win, of truer faith and purer love I must attain; but I am not left to do it all alone. This sacred page is all ablaze with promises of divine aid. One pierced hand of Christ points to the heights to be scaled,

but His other clasps my own. In the upward path I see obstacles to overcome. My eye catches the gleam of armor and my ear the din of battle; but above it all is the glorified summit and the peace of God. And so I go on, placing my feet in the footprints of my Lord, believing that, if in Him, I shall be like Him, trusting in the enlightening and purifying influences of the Holy Spirit described as the Sanctifier and Sealer of my Redemption, who, though not for a moment lessening my freedom to choose evil nor lightening my responsibility nor taking away my awful power to defy and defeat the thorn-crowned Son of God, will lead me safely up and on, within the gates of glory. "Being therefore justified by faith, let us have peace with God through our Lord Jesus Christ; through whom we have also had our access by faith into this grace wherein we stand; and let us rejoice in hope of the glory of God."

This cumulative life in Christ is, also, outlined in the Gospel as practical and aggressive. The "new" life is to be lived in the world. Christ in Nazareth toiled at the carpenter's bench. Christ in us must toil through hands busied with common things. The cleansed man is a commissioned man. In that one word of his last command, "Go", Christ gathered up all commands and all truths of Scripture. "Go" is the condensed logic of the Bible. When the heart has found Christ it cannot rest until it has brought another to Him. Thus His kingdom has sprung up by the constraint of His love impelling His disciples to preach the Gospel "along the lines of kinship and affection" and through the ties of human brotherhood. For mutual comfort and support, and for greater efficiency, the multiplied subjects of this heaven-born Kingdom inevitably crystallize into the church, a divine institution, in its very

nature missionary, with sacraments of baptism and the Lord's Supper, to be devoutly received by all who love Jesus, with sacred claims on the fellowship, energies and possessions of every believer, through whose agency the knowledge of Christ will be carried to the ends of the earth until, at last, no race will be ignorant of the story of the manger and the cross.

As I read of these last things, I am convinced that the resurrection of the dead and the life everlasting as described by the Saviour and apostles are the logical outcome of all that goes before. The resurrection of Christ is stated not merely as a fact, but enthroned over all facts of Scripture. It is the hinge on which the door of Salvation swings. On Calvary Christ demonstrated His Love: in His resurrection, the efficiency of His love. It is the Gibraltar of faith. In Him we also conquer death. Eternity is our future. The

grave is a gateway in the path of life. With resistless logic the Scripture compels me to face a future judgment and an apportionment of reward or punishment on the basis of character. Nowhere does it give me reason to suppose that at the final coming of Christ all will have accepted Him: but, rather, that before the judgment bar on high will stand with the redeemed many yet in sin. It expresses in words of passionate entreaty the love of God and His unspeakable longing for the salvation of every soul, and yet in language whose simplicity awes me, assures me there is a point where the stream of humanity divides to join no more,—the righteous to go into endless joy, the wicked into death everlasting. The more I study the Scriptures the deeper my conviction that character is fixed in this life for all eternity. There comes a time, this side the shoreless sea, when character will solidify to eternal gran-

ite. Against this the Prophet warns. With an earnestness which leaves no room for doubt as to what He knows, our Lord urges men to believe now. Paul and the Apostles who follow Christ closely in time and, clearly, in substance and style of preaching, evidently have the most intense conviction that for those who die in sin no new opportunity of repentance will be given. The problems suggested by this glimpse within the veil are not for me to solve. The eternal future I must leave with God. The present He has left with me. Concerning the future of the millions of the unchurched, who die in heathen darkness in lands unilluminated by the light of Christ, the Bible is silent. Concerning my duty toward the living heathen it speaks in tones of thunder. My Judgment for neglect to tell them of the cleansing Christ is not left in doubt. Their Judgment for not loving and living the Christ of whom

they have never heard, is to be left, without fear, to the wisdom, justice, and love of Him whose silence is better than the wisest utterance of the wisest man, who, revealed on the first page of the Bible as Creator omnipotent, on the first of the Gospel is unveiled in His perfect love in Jesus, the Redeemer, and on the last in His glory as King, omnipotent and eternal, of a new creation, a universe harmonized by faith and love.

Such statements the Bible makes to me. What is it and its statements worth? How am I to account for it as a fact? The Bible itself must answer. Reviewing it, I find it unlike any other book in its spirit and its character. Composed of at least sixty-six different parts, written by many men of varying degrees of culture, of diverse nationalities, living in ages far apart, and under every variety of condition in life, who, with few exceptions, knew

nothing of each other and wrote from every conceivable standpoint of experience, to meet widely divergent needs, it is, nevertheless, one Book, "a living body fitly framed and knit together," one in the truth it voices, one in its life-giving power. This Book, its unity of teaching, its power over all ages, its permanence as a force in life, its freshness, and its ability to meet the needs of all hearts, is a fact impossible to account for on ordinary grounds. It is the Book of God. This is the only explanation of itself the Bible offers; this the one it most clearly and emphatically does offer. To me this is the only rational explanation of the Scriptures. While it does not free them from all mystery, without it they are mystery only. This is the only explanation, too, of the singular history of the Bible, of the fact that the billows of persecution have dashed against it in vain, and the fires of hate left it unharmed,

that it has overturned the hoary throne of superstition and broken the iron gate of formalism, that it moulds human lives in the likeness of the divine and makes men sing in the arms of death. The Bible is the one staff that never breaks in the hand of the living, the one pillow that is ever soft to the head of the dying. To formulate the inspiration of the Scriptures is no easy, perhaps not a possible, task. Under it the writers of Scripture were not machines but intelligent penmen of God, susceptible to the influence of the life of the periods when they wrote, lifted above the possibility neither of intellectual error nor of moral wrong doing, yet so guided of God as to reveal Him and His truth for all men and all times. It is redemptive, pointing to Christ. It is an inspiration of truths, not of words, depending for its authority and trustworthiness not on the genuineness of any one book nor on the accuracy of any

one statement. It is such that the Bible has divine claims for the attention and belief of every soul, as the only authoritative rule of faith and practice to ignore which is to be ignorant of God and to come under His condemnation.

Such teachings, brethren, do I find in the Bible and thus do I account for it as the greatest fact in the world.

The next step is clear. This Bible must be my Bible, this universal Christ my own. My sinful heart may resist allegiance to it, my hands refuse service to Him. The logic of duty, however, is plain. Christianity is the best religion; best, because it, alone, provides redemption from sin; best because it, alone, gives with its ideals power to attain them; best because it, alone, teaches me to say to God, "My Father", and to man, "My Brother"; best by the testimony of its deeds from Eden until now. It must be this religion or none.

How came I to accept it? The story of my christian experience is the simple chapter found in the record of many lives. The best gift God bestows on childhood—a christian home—was mine. If I had a hundred lives and lived them, each, as God would have me, I could not repay the debt I owe my father and mother for their prayers, their christian counsel and example. The earliest memory of my life, back of which there is no conscious existence, is of standing at my mother's side, listening as she told me of the heavenly city. The words then spoken, like the lips that uttered them, were silenced long ago; but the truth sown in my heart that far off hour has had power to shape and strengthen all my life. Despite all knowledge of duty and all voices of conscience, I sinned against the light through all my boyhood; for it was not until my name was enrolled among the students of Amherst that, on this hallowed

hill where hundreds have found their Saviour and themselves, I too, on the threshold of college life, eighteen years ago almost this very day, found my Saviour and myself. A classmate took my hand and placed it in the palm of Christ. From then until now, although I have sinned and done evil in His sight, He has never turned from me. His grace has been sufficient. His word has been fulfilled. Every victory in temptation, every comfort in sorrow, every inspiration for life's hard battle has been His gift. All in me that will bear the testing of God at the end has come from His life in my soul.

With the acceptance of the Bible as the law of my life and of Christ as my Redeemer and Lord, came, by necessity, the acceptance of the one duty of every christian, the proclaiming of the Gospel, as the purpose of my future. In what sphere could I best fulfill this mission? The law, I thought,

was the place for me; but ever beneath this decision was a throbbing restlessness which I now know was the quickening presence of the Holy Spirit. At last, in the closing week of my senior year, I probed it to the centre to find it, God. Under the pressure of duty I then gave myself gladly to the ministry of the Gospel, in which for ten years I have been an unworthy but joyful laborer, and to leave which now would be harder than to leave life itself. I cannot thank God enough that He called me to the highest throne man can ascend,—the pulpit of the ministry of Jesus Christ, the Lord. After two pastorates that have been but one bright experience of blessing, of joy, of loving sympathy, I come now to be pastor and teacher at this fountain head of character. As the minister of Christ here where purposes of manhood are formed and the future of multitudes determined, I can give those whose lives I shape only

the Christ I found here and the ideals and hopes I received from Him. It is not for me to bristle with weapons from the armory of argument but to hold up the Cross of Jesus Christ. Whatever treasures of knowledge the preacher may gather from the wide fields of art or science or philosophy, to the Bible he must come for corner stones for his faith in God, and for inspiration and guidance, in the practical duties of his laborious life. The truths which bear the test of experience, the facts which passing days make more precious, and sorrow and death more real, he finds among its pages. To the Bible and its central theme, redemption from sin through faith in Jesus Christ, the college pastor, above every other pastor, must cling as for his life. The students of this college need and ask for no new Gospel. They are human beings, with all the sin and sorrow, the hopes and fears of human beings in every land and age.

There is for them, above all men, no hope of victory over sin, no promise of true usefulness in their generation, no way of living now nor in the dreamed of future to the high level of their opportunities and obligations, save as they know and humbly follow the Christ of Calvary. To know in this pulpit and in these college halls nothing save Jesus Christ and Him crucified is then my purpose and my prayer.

Thus, brethren, do I come into your presence, with honest effort to lay before you my honest self. The truths I believe, I hold with an outward, but, I trust, an ever upward look, and, I earnestly pray, ever in the sympathy of Christian love with those who differ from me in the interpretation of God's word. Thinking backward to the beginning of my ministry I find no change in what I believe but much in the way I believe. The truths familiar from childhood have become more personal and there-

fore more precious. The Bible is to me less a Book, more a living thing,—its characters living, fellow men whose hands touch my own across the years, with hearts and hopes, with faith and fears like mine. I find it less and less a system of theology, but more full of truths, some to be defined, all to be loved and lived and preached. With greater joy and hope than ever before do I rest on this Bible as the sole foundation of my faith and the only and sufficient message for the pulpit of Christ. As I ponder its pages and go to and fro among men, I find but one thing worth living for,—with all my strength to hold up the Cross of Christ, to preach Him, not as the great Teacher, not as the perfect Example, though He is both, but as the only begotten Son of God, leaving the glory of heaven for earth's humiliation, uniting His unspotted divinity with our sin-stained humanity, toiling, suffering, crucified for

our sake, risen for our justification, enthroned for our adoration. To the sinner I must lay bare his guilt and the awful certainty of punishment; but much more is it my blessed task, with the blood marks on the Cross for my witness, to tell the love of Christ, proclaim His promises, herald Him Redeemer from all sin, His the only "name under heaven given among men, whereby we must be saved." With this singling out of the Bible for my authority and the Cross for my theme, has been coming hunger for more of the matter and method and manner of Christ himself; for the people heard Him gladly. To make the people hear gladly, to make them see that the Gospel touches life at every point, that it has for them all some priceless gift, that it will lift them above discouragement, give them victory over temptation, cleanse them from all sin,—to convince them that for this new time there is nothing like the new life in Him,

to popularize in Christ's way, the minister, the pulpit, the church, is the work of the hour for this pulpit as for all. Christ hungers for the people, and they, unconsciously, for Him. When they hear His voice they follow. They eat when His hand breaks the bread. That I may preach the old Gospel in this old way which caught alike the ear of the rich, the poor, the scholar, the unlearned, and sent them forth ambassadors of Christ in daily life, that, as was here done for me, I may place the hands of sinning men in the Hands pierced for their sake is, then, my prayer,—a prayer which can be answered, I well know, only as it is full of the purpose to present myself a living sacrifice, each day, for Christ, full of faith in God, and full of longing for the glory of Him who hath loved me and washed me from my sins in His own blood, to whom, with the Father and the Holy Spirit, be glory and dominion forever and ever. Amen.



DISCOURSES
AND
ADDRESSES
AT THE
INSTALLATION AND INAUGURATION
OF THE
REV. WILLIAM A. STEARNS, D. D.
AS
PRESIDENT OF AMHERST COLLEGE,
AND
PASTOR OF THE COLLEGE CHURCH.



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AMHERST:

PRINTED BY J. S. & C. ADAMS,

1855.

REV. DR. HITCHCOCK having resigned his office as President of Amherst College, after a highly successful administration of ten years, the Trustees of the Institution, at their annual meeting, August 8th, 1854, made choice of REV. WILLIAM A. STEARNS, D. D., of Cambridge, as his successor. Mr. STEARNS having accepted the appointment and also answered in the affirmative a call from the College Church to become its pastor, Tuesday evening, November 21st, and Wednesday, November 22d, were assigned as the time for the Installing and Inaugural services.

The Installing Council assembled, on the day appointed, in the Rhetorical room, at four o'clock P. M. REV. DR. VAILL, of Palmer, was chosen Moderator, and REV. DR. BLAGDEN, of Boston, Scribe. After the usual preliminaries and a full exposition of principles of belief, views of the ministry, &c., by the pastor elect, the Council adjourned to meet in the Village Church at seven o'clock in the evening, for the Installation.

The introductory prayer was offered by REV. MR. STONE, of Easthampton. REV. MR. LEAVITT, of Providence, preached the sermon. DR. HITCHCOCK gave the charge. The Right Hand of Fellowship was presented by REV. MR. PAINE, of Holden, and an address made to the College by REV. DR. J. S. CLARK, of Boston. The two last mentioned services were performed extemporaneously—the former appropriate and impressive—the latter full of practical wisdom—both having perhaps more of the unction of the occasion than is usually realized even in premeditated performances.

The Inaugural services of the 22d commenced at ten o'clock A. M., in the Village Church. The services consisted of singing by the College choir. Prayer by REV. DR. CLARK. A historical address by the retiring President, including the ceremony of giving the College seal, charter, &c., as an act of induction, to his successor, and closing with the announce-

ment of a donation of ten thousand dollars, to the College, from the Trustees of the late Samuel Appleton, for the erection of a Cabinet of Natural History. This address was followed by a few beautiful and appropriate remarks from COL. A. H. BULLOCK, of Worcester, communicating the doings of the Trustees, in reference to the aforesaid donation. Mr. BULLOCK's remarks on the reception of this gift were received with universal and hearty applause. Two or three degrees were conferred by the retiring President, among others one on ALVAN CLARK, Esq., of Cambridge, maker of the magnificent telescope recently presented to the College by RUFUS BULLOCK, Esq., of Royalston, Mass. After a few minutes recess, a Latin Oration of a congratulatory character was delivered, according to appointment, by HASKET DERBY, a member of the Senior Class. The closing exercise was the Inaugural Address by the President.

The following is a copy of the votes passed by the Trustees, in reference to the Appleton donation.

Voted, That the Trustees of Amherst College hereby express their profound gratitude, in which all the alumni and friends of education will unite, to Messrs. NATHAN APPLETON, WILLIAM APPLETON and N. I. BOWDITCH, Trustees under the will of the late SAMUEL APPLETON, for the large and generous benefaction which they have conferred on the Institution in the donation this day communicated to the Board.

Voted, That fully appreciating the noble and exalted purpose which was cherished by the excellent and lamented deceased, in the trust by him committed to the discretion of the Trustees, and fully concurring with those gentlemen, in their estimate of the object for which they have designated this donation; this Board hereby accept the same, and will appropriate the funds to the erection of a Zoölogical and Ichthyological Cabinet, in accordance with the views of the said Trustees under the Will.

Voted, That the building aforesaid when completed shall be called and known by the name of the APPLETON CABINET.

Voted, That Messrs. BULLOCK, HITCHCOCK and CHILD be a Committee to communicate a copy of these votes to the said Trustees under the Will.

S E R M O N .

BY

REV. JONATHAN LEAVITT,

of Providence, R. I.

SERMON.

"YE ALSO HELPING TOGETHER BY PRAYER FOR US, THAT FOR THE GIFT BESTOWED UPON US BY THE MEANS OF MANY PERSONS, THANKS MAY BE GIVEN BY MANY ON OUR BEHALF."—
2 Cor. 1 : 11.

THIS occasion takes hold on infinite interests. For from this hour dates a new ministry in this College Church. And, if the good providence of God, shall prolong it, its influence, for the conversion and religious usefulness of students successively gathered here, may originate hundreds of ministries, which shall diverge from this spot, in dimmer or brighter light, to the ends of the earth. Its influence may, also, under God, give hundreds of model christian young men to all the other learned professions. It may, moreover, largely bring into realization the true ideal of what a christian college ought to be within itself, namely, its whole growing, busy, intellectual life, one continuous holiness to the Lord. So bright possibilities of good open to our hope within this new pastorate. And on the other hand, equal liabilities present themselves, since all men are ever fallible and frail. So that, in most sober estimate of it, the event of this hour may prove within this its sphere, a solemn crises for good, or its opposite, touching the well-being of man and the glory of

God for time and eternity. And can any human influence decide the result auspiciously? There is an influence, presented in our text, which could. It is,

The Intercessory Power of the Church, as to the ministry.

It was embodied in the text by a great preacher. He was not a whit behind the very chiefest apostles. Miracles and conversions marked his pathway amidst the nations. Yet, great as he was in his work, he attributed to the church of his time, intercessory power to determine the measure of even his service and success. To the entire church at Corinth he said, "Ye also helping together by prayer for us, that for the gift bestowed upon us by the means of many persons, thanks may be given by many on our behalf:" as if he said, Dear brethren, co-intercessors at Corinth, all of you join your prayers together with mine for me. You are many. Your influence is proportionate to your numbers. By means of you, the many praying persons at Corinth, the gift I need for my ministry, may be bestowed upon me. So clear, on the face of his words, lies the sentiment, the intercessory power of the church, as to the ministry. And if the help of this power in the church was important to Paul, it is to every preacher on earth: and not least to him, who preaches to a College. And if, under God, it could make Paul all it was desirable he should be, then it can enrich this ministry unto all happiest results. Scarcely, then, could a more practical appeal be urged this hour in this presence, than this our theme,

The Intercessory Power of the Church, as to the ministry.

And mark the exact import of its terms. The Church means the converted, associated as such. The ministry means authorized preachers. And the intercessory power of the church in regard to the ministry, is the whole influence, which the prayers of the church can put forth to bring the chosen men of God into the ministry, and then fully to empower them for their best success in it. The extent of this power will appear as we proceed to enforce the truth, that it

actually exists. The church does not feel that such a Power has actual existence, at her very hand. She does not wield it as if she did. She needs to see its reality broadly as it lies open in the Bible. We need this. So seeing it, we may move the great precious influence with the Lord of the ministry more as he would have us. We will, then, survey our subject somewhat widely, as it lies in the Bible.

And at the outset of this survey, this fact meets us, that all the general promises of the Bible, to prayer, apply fully to prayer made by the church for her preachers. One of these general promises is, "If ye shall ask any thing in my name, I will do it." With what emphasis may the converted, together, plead Christ's name in behalf of Christ's ministers. Then how surely are they heard! Another general promise to prayer is, "If two of you shall agree on earth, as touching any thing that ye shall ask, it shall be done for them." If then the Lord's people shall unite to ask greatest things in behalf of their pastors, greatest things shall be wrought of God, in, and for, and by his ministers. This argument from the general promises of the Bible to prayer, might be extended. But it is already as conclusive as it is brief. In it we see Christ's chosen ones on earth, clothed with intercessory prerogative, regarding his ministers.

We very distinctly see the same also, from their intercessory influence, respecting civil rulers. That appears in these words. "I exhort that intercessions be made for kings, and for all that are in authority; that we may lead a quiet and peaceable life in all godliness and honesty." Here, God in effect, says to his people, "By your intercessions, you may, through me, sway civil government to every thing necessary to the peace, virtue, and piety of the government." Now civil rulers are God's secular ministers. And thus authorizing his praying people to sway his secular ministers, to a given effect, has he not authorized them also to sway his spiritual ministers to the same equal effect? To a demonstration he has. For his spiritual ministers are a main

instrument, through the public influence of the pulpit, by which his praying people control his secular ministers. And, of course, they, i. e. his praying people wield the instrument of their control. They wield the ministry, by their power with God in prayer. They do, if they will. And they move it unto all the results of peace, virtue, and godliness. Verily the intercessory power of the church, as to the ministry, is most comprehensive.

Thus far our argument is inferential, though very conclusive. But we turn now to what is specifically related to our subject.

Christ said to his disciples, "Pray ye the Lord of the harvest, that he will send forth laborers into his harvest." In these words, he directed the then existing church to pray for a ministry, sufficient for the then existing harvest. The prayer, if duly offered, would secure this. The command means that it would. The Lord of the ministry here teaches his people, that, if they will but duly use it, they have the power in prayer to fill the whole field with laborers. And of course with laborers qualified to gather in the harvest. For with unqualified laborers, the harvest would fare worse than with none. Christ then teaches his church, that hers is the influential intercession, not only to send out the requisite number of reapers into the field, but also, under God, to endow each one of the needed number with the needed energy and skill for most blessed efficiency. Here is the great, explicit commission of the Church, by her power in intercession with God, to make the ministry just all it need be.

And at length this prerogative of the Church, under her Head, was to be somewhat worthily tested. The Master, when about to ascend from earth, said to his chosen ministers, "Tarry ye in Jerusalem, until ye be endowed with power from on high." And then, to represent to them, in symbol, the kind of power to be received, and his own intercessory agency in heaven in bestowing it, he breath-

ed on them, and said unto them, Receive ye the Holy Ghost ; and, having said this, he ascended to the throne of his heavenly mediation. And they, in order to fulfil the kind of tarrying now to be effectual, betook themselves to that blessed upper chamber of prayer in Jerusalem. There were gathered with them members of the existing church, making in all an hundred and twenty disciples. There they continue with one accord in prayer. And for what do they pray ? For what should they, but for that for which they are tarrying, the powerful endowing of the chosen ministry ? For this they pray ten successive days ; and the intercessory power of the church prevails ; and on each of her preachers sit in an instant manifold symbol tongues of flame ; and around them through all the place moves power, as of a rushing, mighty wind. The church had perseveringly, adequately, worthily helped, together by prayer, and now the great ascension gift was bestowed, by this means of many praying persons. The church, for her prevalent intercession, had now a prevalent ministry. Joyful thousands attested its united prevalence in a day. The number of her preachers was, for the time, full, before. But her great ten days' prayer had brought down to her ministers their great full endowment for glorious success. So worthily did the church prove her collective power with God, in behalf of the ministry. Could she ever after neglect her prerogative ? Yes ; to-day she does. And, mournfully, her preachers, in this respect, unhelped of her, are therefore, unhelped of God. No Pentecost of power comes to them, because no Pentecost of prayer for them comes to the church. In just displeasure, the Hearer of prayer waits for the Church again to take up and duly honor her neglected prerogative of prevalent intercession for the ministry. Still further on in the New Testament history of this exceeding power of the people of God with him in regard of the ministry, it wrought intercession mightily in connection with another, the thir-

teenth Apostle, by birth, Saul of Tarsus ; by the new birth and a divine call, Paul the Apostle.

His Creator had made him, in his constitutional being, a very genius of quick, swift energy of the soul and mind ; as if an instinct missile from the bow of Omnipotence ; an electric bolt of daring purpose ; ever pressing achievement up to the stupendous limit of impossibility even to him ; ever urgent and restless to dash down and overleap the stern barrier, into some ampler realm of nobler deeds beyond.

While yet a young man, on a career of "exceeding mad" persecution, approaching the city of Damascus, suddenly a light from a heaven, above the brightness of the sun at high noon, smote him to the earth. From the dust he quickly prayed to the Jesus he had persecuted. This young Napoleon of the first persecution, in trembling prostration, prayed to the enthroned Nazarene, Lord of the overpowering glory. And being summoned to it by Jesus, he arose from the earth, and girded himself for his great Apostleship to the Gentiles. Christ crucified, he fully preached from Jerusalem round about unto Illyricum, to Rome, may be, to Spain, as he proposed, if not even to Britain. Around all the northern shores of the Mediterranean, the clustering tribes and nations of the Gentiles, not excepting ethereal Greece and iron Rome, started at the voice of his ministry, and moved in line of quick succession towards the Cross. And, while thus marshalling so vast, so multiform, yet assimilated a host unto Christ crucified, he had a pen inspired put into his hand from the skies, and gave to all coming time fourteen epistles, two-thirds in number, in amount three-fourths, of the inspired epistles ; four other Apostles, Peter, James, John and Jude adding only seven of the twenty-one, and mostly shorter ones to the number. In miracles wrought by him ; in conversions, spiritual miracles, wrought with him ; in churches planted and sedulously edified ; in books added to the inspired canon ; in a life, one continuous prodigy of self-sacrificing hardship, throughout a miracle of spir-

itual beneficence ; in these, combined in one service, he was the great minister of the Apostolic, the great, age of Christianity. In grandeur of mental being, and of official mission, he was the Moses of the second dispensation.

Great ministers of God, from amongst weak, low men, Moses and Paul ! Compeers in grandeur of mental being, of ministerial mission ! One, the chief minister of the law ! The other, the chief minister of the Cross ! The one, Moses, leading the tribes of the literal Israel to Jordan, the limit of Sinai's land of the law ! The other, Paul, leading, in longer line, the moré numerous and mightier Gentile tribes of the spiritual Israel, not in a literal, but spiritual movement, quick like himself, across the law land of conviction of sin, into the Canaan of the Cross, there planted beneath its mid-day beamings of justifying sovereign grace, radiated full on them through the preaching and Epistles of the great persecutor, himself having been suddenly conspicuously justified by sovereign grace into an eternal joy of faith !

Surely if any human herald of God ever stood superior to the intercessory power of the church, it is this man of surpassing gifts of nature, and of the new nature. He shall be a test example in our argument, fully presented, and very decisive. If he, great in nature and in grace, leaned on the intercessory church, then his example is the ultimate model of inspiration for all the ministry, to the end of time. It is also the strongest demonstration to the church of her responsible power in this behalf.

His own words shall present him in this respect. To the Corinthians he says, "Ye also helping together by prayer for us, that for the gift bestowed upon us by the means of many persons, thanks may be given by many on our behalf." To the Christians at Rome he writes, "Now I beseech you, brethren, for the Lord Jesus Christ's sake, and for the love of the Spirit, that ye strive together with me, in your prayers to God for me, that I may be deliver-

ed from them that do not believe in Judea, and that my service, which I have for Jerusalem may be accepted of the saints, that I may come unto you with joy by the will of God, and may with you be refreshed." To the Ephesians he says, "Praying always with all prayer and supplication in the Spirit, and watching thereunto with all perseverance and supplication for all saints, and for me, that utterance may be given unto me, that I may open my mouth boldly, to make known the mystery of the Gospel, for which I am an ambassador in bonds, that therein I may speak boldly, as I ought to speak." To the Thessalonians he writes, "Brethren, pray for us." And to the Hebrews he says, "Pray for us; and I beseech the rather to do this, that I may be restored to you the sooner."

Thus the spirit of inspiration moves his pen to call church after church to intercession for his ministry from place to place. Still more, of course, he would naturally solicit for himself the prayers of the church with whom he was at the time preaching; thus forming all the churches, founded and trained by his personal labors, to a kind of concert of prayer for the Apostle to the Gentiles. Thus there came about a vast concentration of the intercessory power of many churches in his behalf.

But what other minister of even the New Testament once asked for himself the prayers of a single church? Where will the record be found?

And here may be the explanation, in part, of the conspicuous fact, that Paul "labored more abundantly than they all," beside, of the primitive ministry. The churches prayed for him, as he so much requested them to do. Heaven concentrated its answers upon, and around, the man, so much prayed for; and his whole being, surcharged, and helped on every side, by mighty aids from above, moved on tireless, in labors more abundant than all other ministerial labors of the time. Favored preacher, and favored churches, who, taught from above, understood and

acted upon this economy of intercession for ministerial success! Their example, and their answering unmeasured blessing teach all ministers and all churches a lesson, very momentous to the end of time. And we carry up our argument still higher than their example, and its approving blessing from God. We reach some of the divine reasons for this way of blessing ministers through the prayers of the church. Divine reasons are infinite arguments for any thing founded on them. That must be, for which God has a reason. An intercessory power must exist in the church for the ministry, if God sees reason why it should. And the text states one divine reason for it, and involves more; and it cannot but exist.

One reason is, that all Christians may equally share in the honors of the usefulness of the ministry, all having helped the ministry together by their prayers to be useful.

Another reason is, that all Christians equally, may thank and praise God only for all the usefulness of the minister, now, and forever in heaven. Prayer before, answers praise after, blessings come: full prayer ensures full praise. "That for the gift bestowed on us thanks may be given."

Another involved good is, that, thus, all the Lord's people are equally dependent upon each other, the ministry upon the prayers of all the church, as all the church are upon the teachings of the ministry.

And through these three reasons, as through transparencies, we see three others, the equal impartial electing love of the Father, to all his elect, and redeeming love of Christ to all his redeemed, and sanctifying love of the Spirit to all his sanctified: this thrice equal, impartial love of the Trinity to all the saved, making them all equal in divine good, all the church equal with all the ministry, in honored usefulness here, and in blissful praises forever in heaven.

And two other benefits, incident to this equal interdependence of the spiritual teacher and the taught, are, that the church member may not censure his minister for what

may be consequent upon his own failure to intercede duly for him; and the preacher may not vaunt himself over the lowest brother in the church, whose intercessions may be the true power of his own ministrations.

All these great issues of good from it are final causes, divine reasons, for the existence of this power of prayer in the church. God, by his Apostle, assigns one of these reasons himself, namely, that all his people, having besought ministerial success from him, may ascribe it all to him. A power in the church, demanded by so many reasons, and by one so vast as that divinely assigned, must have existence under the ordering of Him, who is infinite Reason.

And, while thus argument rests on argument for the truth that such a power must, and does, exist with the people of God; is there even one opposite argument, which the largest candor should recognize as such?

Does such intercessory influence in the church seem to overshadow and neutralize the suppliant power of the ministry for itself? No. Both act in the same direction, for the same blessing on the Christian preacher. He may pray not without prevalence for himself; yet the church with far greater prevalence for him, according to the number of its co-intercessions; inasmuch as the hearer of prayer is no respecter of persons. And what preacher welcomes not this influence in the church the more, as it is the greater, though eclipsing his own at the Mercy Seat!

At times indeed, in the ordering of glorious sovereignty, the pastor, like Moses and Samuel for Israel, may prevail in prayer for his whole people. At other times of crying degeneracy, he may prevail only to save his own soul. Yet these occasional exceptions only illustrate the general divine rule, of an intercessory influence in the church, great according to the numbers wielding it.

It would ever stand conspicuously great, in its blessings attained in the ministry, were the conditions of its efficiency always fulfilled. They are three. Thorough honesty on

the part of the ministry, prayed for, is one. Paul is emphatic upon this. In the text he asks the prayers of the christians at Corinth for himself, and in the next sentence, adds, "For our rejoicing is this, the testimony of our conscience, that in simplicity and godly sincerity, not with fleshly wisdom, but by the grace of God we have had our conversation in the world:" as if he would assure his fellow disciples, that they need have no fear that dishonesty on his part, would countervail their prayers for him. And, in the same sentiment, he says to the Hebrews, "Pray for us; for we trust we have a good conscience, in all things willing to live honestly." Like Paul, let each of the ministry ever be able to say, "I have lived in all good conscience before God until this day," and a prime condition of the efficacy of the intercessions of christians in their behalf would be fulfilled.

Another condition of it, is, that the preacher be himself, thoroughly faithful in prayer, as was Paul.

And still another of its conditions is, that the intercessions of the church be, in due degree, general, devout, and persevering.

These three conditions thus fulfilled, the experience of every preacher, in regard to whom they were, would doubtless itself be a glorious demonstration of a high intercessory influence in the church of Christ, in behalf of his ministers.

Its final results shall be our last argument for it. For, under the government of the Allwise, the claim that any important power exists, and should be earnestly exercised by his people, is very impressively realized in its final results.

And our stand-point, taken for the survey of these results, shall be some bright height in heaven, amongst the everlasting hills, from which came all the help ever evoked on the ministry, by the intercessory church. And our time taken for this survey shall be, after the judgment shall

have gathered all the true ministry, and all the true church to their celestial domain, studded with eminences of glory. And now the Master has adjusted all final rewards. He has said to some, who were the more eminent on earth, concerning the less eminent, "I will give to these lower, even as unto you." "He that received a prophet, in the name of a prophet, shall receive a prophet's reward." He that "prayed for a preacher in the name of a preacher, shall receive a preacher's reward. And he that interceded for an apostle, in the name of an apostle, shall receive an apostle's reward. So has he said, and so done, in divine equity, and eternal judgment. Accordingly, amidst these eminences of celestial light, on one side, we see Paul the Apostle, while on earth, borne preëminent on the intercessions of laboring multitudes who are now standing on essential equality of blessedness and glory with him, whose ministry their intercessions had empowered through God. And amongst them are martyr saints from Judea, whose groans and cries to God, under the persecuting race of Saul of Tarsus, had prevailed, beyond their own thought or exact request, unto his glorious conversion and apostolic calling. And nearest him, amongst them, we seem to see Stephen, whose dying cry, "Lord, lay not this sin to their charge," had been answered in the pardon of the young persecutor, who was standing by "consenting unto his death," and in his zeal holding the garments of those who stoned the praying martyr. And do we not seem to overhear Paul, at some interval in their celestial song, turning to the glorified martyr at his side, and saying to him, Your expiring intercession, "Lord, lay not this sin to their charge," revealed in my conversion, to my soul, through the Holy Ghost, that great truth, the intercessory power of the church, for the ministry, by which intercessory power God used so to empower my ministry. And Paul, in heaven, could not be so blessed as he is, did not the martyr inter-

tercessor for him, and all the brotherhood of intercessors for him stand around him on substantially his own heavenly altitude of glory.

And, on another side, we see Moses, and grouped around him, in compeer glory, the once captive Israelites in Egypt, whose groaning heavenward, moved God, beyond all their distinct request, to come down to the burning bush in Midian, where Moses was, and there call him, and thenceforward empower him unto all that his ministry was. And Moses, who said on earth, "Would God, all the Lord's people were prophets," has now in heaven a full congenial blessedness, beholding in exulting throngs around him the agonizing intercessors of Egypt, prophets in reward, equal with the prophet whom their intercessions evoked from exile to a glorious ministry on earth.

And, on yet another table land of glory, amidst its heights, we behold Elijah, and encompassing him, co-equals in the prophet's reward, the seven thousand, his contemporaries on earth, who bowed not the knee to Baal, whose intercessions for Israel, the God of Israel, we deem answered in the going forth of his power, concentrated, conspicuous on the men of their dark age. And Elijah's heart could not so blissfully see one of them in less than the prophet's full reward.

And at other celestial points, in like equal groupings of fraternal intercessors, we see Luther, and Whitefield, and Nettleton: and uncounted faithful, loving pastors of faithful, loving churches. And that beautiful motto, "that so there may be equality," lives in the full blessedness of all hearts, a divine transplanting from the equal electing, redeeming, sanctifying love of the Trinity to each one of all the elect, the redeemed, the sanctified. Such enchanting beauty and glory in its final results, has the intercessory power of the church for the ministry.

And these results, as we have glanced at them, show

to what large extent the conditions of the efficiency of this power have been fulfilled on earth, already before, and in our own time. Already, in its actual history, it is a mighty power and is to be yet, in Zion's coming better times, far mightier.

On the course of thought we have pursued, we have seen this power made certain to the church, by general promises to prayer, applicable to this; by parallel power in regard of God's civil ministers; by the great commission of the Lord of the harvest to the praying church to fill it with laborers; by the intercessory endowing of the Pentecostal preachers; by the great test example of Paul, fully unfolded, into its theory and philosophy of divine reasons; by its full harmony with the suppliant power of the ministry for itself; by the most reasonable and sufficient conditions of its efficiency; and by its transporting, eternal, heavenly results, already of large completed history on earth. With such accumulated, divine attestation is each true member of Christ's church furnished, that so high a power is put into his own hands by the Head of the church for the sending out, and successful empowering of Gospel preachers.

Will we not all use it, as we never yet have! Shall it not become known, and better used, through all our churches? Should not the members of all our churches resolve, devoutly before God, that they will continually, and largely befriend their own pastors by their best intercessions for them? And should not all christians far more befriend Christ's cause of the evangelization of the whole world, by most importunate entreaty to Him, the Lord of the harvest, that he will send forth all needed laborers, with all needed power, to gather in the whole harvest?

And here, in connection with the christianization of the world, opens upon us a solemn view of the relation of this power of the church to Christian Colleges. The

churches have begun to understand it. Therefore exists their anniversary of prayer for Colleges, on the last Thursday in February. But that day, year by year, should see the churches at the Mercy Seat, on its one momentous errand, as it never yet has. The importance of its object would not be exaggerated, should the day see all churches, all individual Christians, in entreaty with fasting for our Colleges, from morning to eventide.

But, beyond this, the closet of every Christian, the altar of every praying household, the offerings of every sanctuary, should sometimes, not seldom, earnestly, perseveringly, unceasingly bring our Colleges up in remembrance before God. And the continuous prayer of the year, of year after year, should become far more important to them before God, than even the important anniversary day of prayer for themselves.

And should not each Christian College have its special circle of Christian friends, and of churches particularly friendly to it, who, while generously interceding for our Colleges in general, should dwell in special intercessions upon the one College of their heart's special adoption? Would not this be rational moral economy? And should not the officers and Christian students of this College put in requisition their opportunities of correspondence and of intercourse with pastors, churches and private Christians, to enlist, permanently, the largest possible amount of this blessed devotional aid to the furtherance of religion and salvation here? Should not the effort be made the most permanently effectual? Should it not be an adopted purpose with you all, and most persistent too?

And, while the pious students should be remembered in such intercessions; and the unconverted students very importunately remembered; the ministry of our Colleges should be upborne before the Almighty One as with strong crying and tears of holy sympathy. May it not solemnly be said, that Presidents and Professors of our Colleges

who are also their preachers, need four-fold, twice-double, measures of the ministerial unction. Would not all pastors, who have been transferred to the College labors, say so? And should not pastors, with their churches, feel this, and pray for the ministry of our Colleges accordingly?

But let me commend specially to the intercessions of this College Church their associate ministry, their President, the Pastor, and the Professors, associate preachers. Pray daily for them all. Pray for them all, as intensely as if you only did pray for them, and as hopefully as if you knew thousands of pious hearts, and hundreds of pulpits prayed continually for them.

Pray for him, who this hour becomes your pastor. He comes to you from a long pastorate with an affectionate church. Let your hearts as warmly adopt him, and most devoutly and continually pray for him. Seek at once a glorious revival under his ministrations. Plead for it, labor for it, till it comes, graciously hastened.

And now, my brother, my own brother, you enter this hour, into an honored pastorate. Heaven has honored it. I enjoyed, as a student here, its influence when the venerated Moore, the first President of the College; saw its first revival of religion. His excellent successor, President Humphrey, saw also the arm of the Lord made bare, in connection with his labors for the conversion of students here. And his successor, President Hitchcock, now retiring from this pastorate, yet to be still of this associate College ministry, has witnessed like revival visitations within these College walls. The history of this College, in regard to special displays of regenerating power, has hitherto been rich, very rich with mercy; like those of Yale, Williams, Middlebury, and Dartmouth. This, adored be the Author of the grace, this has been, hitherto, eminently a College of revivals. And may your pastorate be one continuous, mighty revival; most pure, deep, all-transforming.

Well have I known you, placed as I was, successor of your father in his ministry, and for years one in your native home. Well have I known the eminently religious parental auspices, under which you were formed to a faith and life, such that you could pass your College course intact of the great religious defection around you, and for many years minister hard by, still true to your father's high faith and spiritual life.

May your influence help largely to keep this College at the utmost *Christian* opposite from the descending pathway of Romanizing and rationalistic Colleges across the sea or this side the sea. And, when you rest from your service here, may thousands of effectual intercessory helpers of your ministry here unto its utmost success, group around you, in the presence of the Lamb, all your vast joy their joy, to his glory.

C H A R G E

AT THE

I N S T A L L A T I O N .

BY

REV. EDWARD HITCHCOCK, D. D., LL. D.



C H A R G E .

MY BELOVED CHRISTIAN BROTHER :

I FEEL as if it would be a work of supererogation for me to go into a detailed statement on this occasion, of the ordinary duties of the ministry, in giving a charge to one, who for more than twenty years has so faithfully and successfully performed them. But it may be more appropriate that I should call your attention to some peculiarities in the character and habits of a literary community like this, that demand an adaptation of ministerial functions.

I remark in the first place, that it is not one of these peculiarities, that in such a community *any substitute can be found for a plain and systematic exhibition of the system of the Gospel.*

The temptation in such a place is very strong to introduce such substitutes to the partial, if not entire exclusion of the naked Gospel ; because such an eclat attends novelty and brilliancy among literary young men of ardent temperament, and so severe are they often in their criticisms upon prosing dulness, under which category they often include a logical and calm exhibition of doctrines. To gratify this taste for the novel, the brilliant, and the poetical, the truth, which saves men, is often sacrificed. It is thought necessary to interest the youthful mind, and, therefore, one man will feel justified in presenting elegant systems of philosophy in their theological relations. Another will amuse and interest by

learned and ingenious modes of interpreting Scripture, which divert the attention from the plain and practical meaning. Another will deck scriptural truth in so brilliant a dress, and in such gaudy colors, that its native form and proportions are lost sight of.

Now such efforts, if properly made, may occasionally be very useful in a literary community. But if they crowd out or obscure the simple Gospel, souls will not be converted. For it is only systematic truth that can save the soul. And in no society whatever should it be preached more plainly and simply than in college. Philosophy may give a graceful form to the sword of truth, and rhetoric bestow upon it a splendid polish, but systematic theology alone can give it a keen edge. And I cannot but regard it as an ill omen, that while men at the present day glory in presenting the principles of every other science in a logical and connected form, there should be such a prejudice against systematic theology, and a preference of loose, indefinite, and merely sentimental views of scriptural truth.

The theology of this Institution is marked and well understood. The system, technically denominated the Doctrines of the Reformation, which you stated so clearly this afternoon before the Council, has ever been plainly preached here, with no attempt, however, to decide between the different evangelical schools among us. But we require no test of belief in those who join us; and give instruction, and award College honors, entirely irrespective of the religious belief. But believing ourselves, that *except a man be born again he cannot enter the kingdom of heaven*, we urge this great truth, and its allied doctrines as plainly and forcibly as we can. If this be sectarianism, then this is a sectarian College. But it has ever been entirely frank and honest in the avowal and defence of its creed, and uses no weapons but manly argument and kind exhortation to win over converts to its adoption. May the Institution never cease to follow this course, and ever regard the personal piety of its pupils as of far higher importance than all other attainments.

The peculiar spiritual dangers that are encountered on College ground, form a second point to which I ask your attention.

At this day we try to fill our library with all works respectably written, whatever errors they contain. For the friends of truth ought not to fear to meet every error in the open field of argument, and there to strip off its meretricious attractions, and show its naked deformity. But in this way the multiplied and ingenious systems of scepticism, baptized and unbaptized, will be thrown before youthful and ardent minds, while yet experience is small and judgment immature. Many of these systems have all the attractions which brilliant genius can give them, and there is nothing more fascinating to the youthful scholar, than original and elegant diction, even when employed to decorate a whited sepulchre, hiding in its recesses the foulest corruption.

Now the College pastor will feel it to be his duty to meet these subtle delusions, to strip off their sophistry, and show the superior charms of truth. Not, indeed, that he should be always employed in refuting error; for, as I have already remarked, one of the most important means of putting down error is to establish the truth, by proclaiming the great principles of natural and revealed religion.

But there are other peculiar dangers in college affecting Christian practice, that demand special attention in the pastor. Among these are the various combinations found there which are often used to crush personal independence. There is first the division into classes; and since there is a general impression that these in their united capacity can never do wrong, the refractory individual, who thinks they can, is branded as dishonorable, and subjected to sarcasm and abuse. Then come the various societies, which in like manner combine to force into conformity those who, for conscience' sake, attempt to stand alone. Such influences, coming unexpectedly upon the young Christian, are usually too much for him, especially as it is his duty to conform as far as possible to the

wishes and opinions of classmates, and fellows of the same society. But sometimes it does not satisfy unscrupulous public sentiment to conform as far as the principles of morality and religion will allow. But a set of rules, not written but understood, called sometimes the rules of honor, are made the standard, which are quite different from those of Paley or Wayland, and, I fear, the Bible also. To help the young man, and especially the young Christian, to steer between this moral Scylla and Charybdis, is surely a duty of no mean importance for the College pastor.

Another prominent, perhaps the most prominent moral danger of College life, lies in social influences. And here the danger is the greater, from the absence of the sacred social influences of home, to which the student has been accustomed, and which have been a guard to him. But now he comes under the influence, it may be, of those who are satisfied with no social recreations that do not bring them within the purview of dissipation. The boisterous frolic soon becomes tiresome without narcotic and alcoholic stimulants. An almost necessary concomitant of these are profaneness and the card table; and before the young man is aware of his danger, he has learned to frequent and enjoy the midnight carousal. Yet this must be indulged away from public observation, in some secure den, prepared by those who pander to criminal indulgence for the sake of a miserable pecuniary reward. So that, although this be one of the most dangerous of all College temptations, and more destructive of body and soul, of talents, morals, and hopes, than any other, yet on account of its secret nature it is most difficult of access by the pastor, and he is often compelled to see evidence in the haggard countenance and miserable scholarship of the student, that the dreadful work of self-ruin is going on, and yet have no such proof as will satisfy partial friends, or fix the charge upon the fascinated victim himself.

An inordinate desire for College honors, whether bestowed by the Faculty or fellow-students, constitutes another peculiar

spiritual danger. And here the great difficulty lies in the fact that efforts for distinction in scholarship are laudable, and encouraged by Trustees and Instructors. Hence the talented and pious young man, not distinguishing between the desire of distinction for the sake of being more useful, and the narrow ambition of standing first among classmates, becomes ere-long, and almost without any rebukes of conscience, a most devoted aspirant for College honors ; goaded on by the sentiment, *aut Cæsar aut nullus*. The disastrous effect of such feelings upon the religious character I need not detail. Indeed I cannot go into this subject now. But I fear that you, Sir, will have too many proofs that what Henry Martyn said of the English Universities in his day, is no less applicable to American Colleges : that “ Christ is often crucified between two thieves—classics and mathematics.” I wish there were only two.

A third point, deserving the special attention of the College pastor, is the rapidity with which character is formed in such a community.

I do not speak with mathematical exactness ; but I have long had the conviction that one year in College is about equivalent to ten years in our country towns—I will not say in our cities—in the moulding of character. Influences, both for good and for evil, cluster around the young man as he enters College walls, that have a fearful power. If fortified by correct religious principle and the Christian hope, he takes a firm stand on the side of truth and piety, his course is rapidly onward and upward ; and having triumphed over College influences for evil, he may be trusted almost anywhere. But if he happens to yield at first to evil temptations, it is painful to see what downward strides he will take towards infamy and ruin.

The College pastor will need but a brief experience to see a realization of these statements, and they will lead him to resolve to do with his might what his hands find to do. With myself the effect of such a picture has been a conviction, that

a revival of religion is as needful in College once a year—certainly once in two years—as it is in most of our country towns once in ten years. To have such seasons occur only once in three years and a third, as they have done here, is not sufficient to sustain the standard of piety where it ought to be ; certainly not sufficient to save a multitude of talented young men, who before such a period expires are often irrecoverably won over to indifferentism, if not hostility to religion.

The probable future character and position of his hearers, constitutes another peculiarity deserving the careful consideration of the College pastor.

He may be sure that a large part of his hearers from sabbath to sabbath, will become ministers, physicians, lawyers, teachers, editors, authors, and statesmen : that they will occupy stations of large influence, and that whatever he can do to inspire them with correct and elevated moral and religious sentiments, and to make them men in the broadest sense of the term, will be conveyed through them to others, and flow onward in the widest channels of influence, to unborn generations. Moreover, should he be the means of the conversion of any young man of good abilities, what an accession would he make to the moral power that is working for the good of our race. In the abstract, one soul is as precious as another, whether civilized or savage, and the conversion of one as important as that of the other. But there is a wide difference, so far as influence upon the world is concerned, between the conversion of the talented, educated youth, and the obscure and debilitated old man. A soul is saved in either case, and, therefore, there is joy in heaven. But in the first example, we may calculate that a movement has been started, by which ten, or a hundred, or a thousand, will be renewed, and perhaps many more.

How many of his hearers may rise to posts of distinguished usefulness, the pastor may not be able to predict with certainty. But the history of the past assures him that some will ; and his partiality for his beloved charge may lead him to ex-

pect that many will. It is not usually till life's meridian is passed that such posts are reached ; and therefore the history of our college, which has not yet arrived at the middle age of man, will give the number of such below the truth, as it shall be developed in coming years. Yet, as the list now stands, we have no reason to be ashamed of it, and it is large enough to be a powerful stimulant to the College pastor. Already thirty-two of our graduates have become professors in our higher institutions of learning, five have been called to the presidency in the same, five have become judges in our superior courts, four have been chosen to Congress, and eighteen have received the honorary degree of doctor of divinity.

But perhaps the College pastor will get most deeply impressed with his responsibility when he contemplates the influence he is exerting upon the churches of our land, as well as upon the distant heathen. Amherst College has furnished upon an average fifteen ministers each year since its commencement. But the annual supply must now be more than this. Suppose only one hundred of the one hundred and fifty professors of religion now in College enter the ministry. This would give a supply of twenty-five yearly. Suppose it twenty, or rather four times twenty, since that is the number of the future ministers of the churches in this or in heathen lands, who will come under the influence of the preaching and other labours of the College pastor. Now it should be borne in mind, that the standard of piety in a church will rarely if ever rise higher than that of its pastor ; and how important does it become, that the piety of those who are to be the future ministers of eighty churches should be kept in a healthy and growing state in the earlier periods of their preparation, especially when it is recollected that probably as many as eight of these will be in heathen lands. And what great importance do such statements attach to the pastoral office in such an institution as this !

Thus far, my Christian Brother, the suggestions which I have made have tended, I doubt not, to deepen a sense of

your responsibility and of insufficiency to discharge the duties imposed upon you, and you are ready to exclaim with peculiar emphasis, *who is sufficient for these things?* I doubt not, however, that you know full well where to resort for support under such circumstances. God is, indeed, as He has styled himself, a God easy to find, especially by all who are striving to do their duty and who feel their weakness. But amid all the untoward influences in College, unfavorable to spiritual progress, there is one cheering fact in this institution, of which I would not have you ignorant. You will ever find here, if the past is an index of the future, not a few bright examples of humble devoted piety; young men who have sincerely consecrated their whole souls—the dew of their youth, to the service of their Redeemer, and whose piety the world's harpy fingers have not defiled. This fire of holy love burns brightly on the altar of their hearts, and you will find them ever ready to do any thing in their power, to advance and sustain the cause of religion in the institution. On these, as upon a forlorn hope, you can rely in religion's darkest hour. You will be cheered too, to find how deep and extensive is the interest felt in behalf of the spiritual welfare of the Institution by the devotedly pious of the land. Nor shall a Divine Influence be wanting in answer to the prayers of so many, who have power with God; and from time to time, you shall witness, I trust, those seasons, so precious to a pastor's heart, when in many a bosom the pangs of a conflicting conscience shall be succeeded by the peace and the joy of a new-born soul. God make you the participator in many such scenes, before you are called to commit to another, the precious trust which we now commit to you!

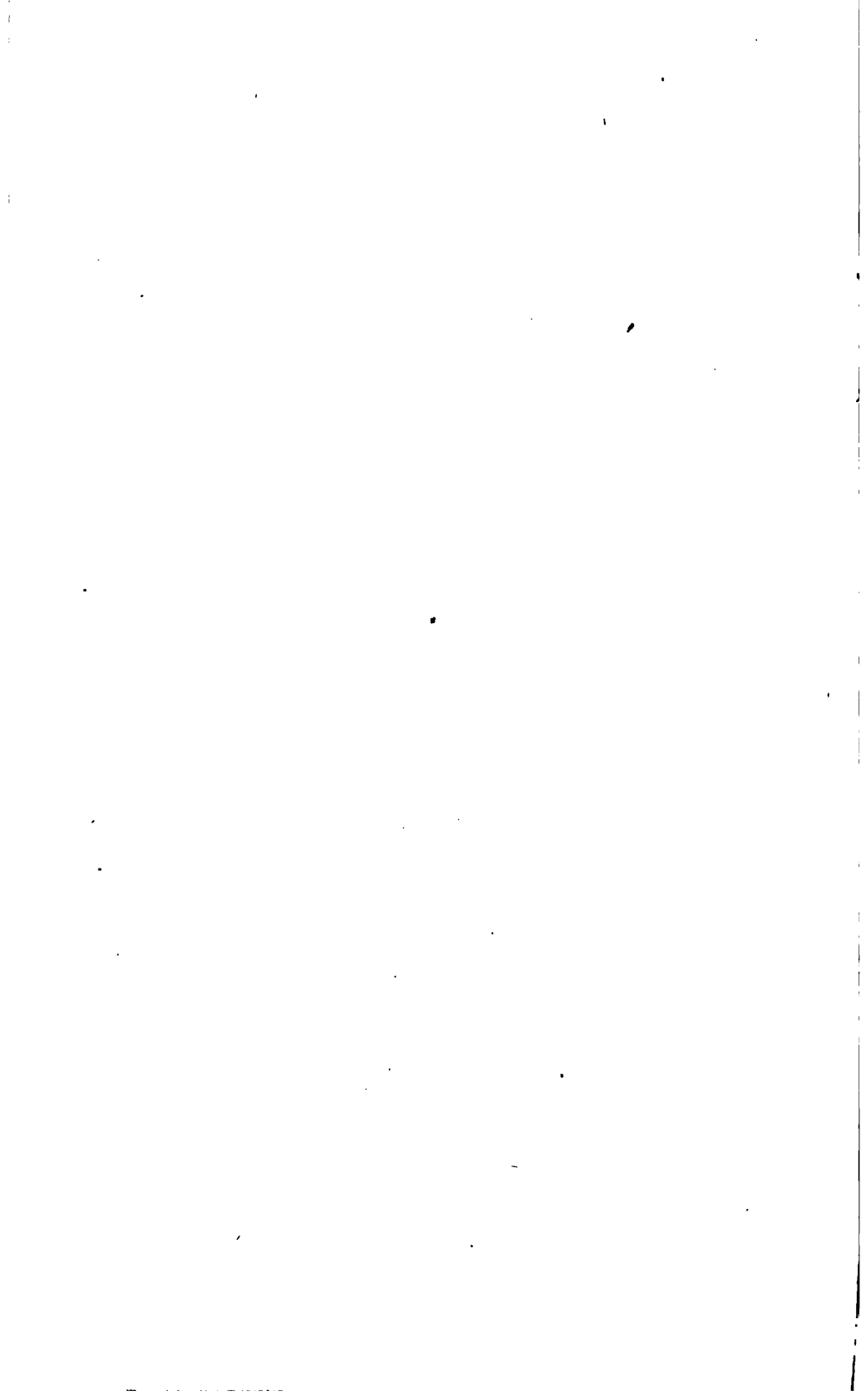
ADDRESS

ON

RETIRING FROM THE PRESIDENCY.

BY

REV. EDWARD HITCHCOCK, D. D., LL. D.



ADDRESS.

RESPECTED TRUSTEES, OFFICERS, AND FRIENDS ; AND BELOVED GRADUATES AND PUPILS OF AMHERST COLLEGE :

WHEN my venerable predecessor, nearly ten years ago, committed the oversight of this Institution into my hands, his parting words consisted mainly of facts respecting its origin and progress ; thus furnishing its future historian with details, many of which he only could give. I propose on this occasion, to follow his example ; attempting, in the first place, to add a few special facts to his statements, respecting the earlier days of the College, and then to go more into detail concerning the last ten years. If, in doing this, I should speak oftener of myself than either I or you would desire, let my apology be the circumstances in which I am placed. For there are times when personal narrative is not egotism. When the campaign is over, the soldier may be allowed to speak of scenes in which he has been an actor ; and personal reminiscences are permitted to those in advanced life, who are passing off the stage of action, which might be improper for those just buckling on their armor, or in the midst of the conflict.

But in the outset let me say, that in looking back upon my connection with this Institution, so manifest is it that God's special providence has brought about all of good it has experienced, even though I was a humble instrument, and so largely have my own errors and neglect been concerned in the evils it has suffered, that humiliation becomes me far better than self-gratulation.

It is now twenty-nine years since I was elected Professor of Chemistry and Natural History in this College; and I cannot but contrast the aspect of things here then, with what they are to-day. I came here in 1825, two years after Dr. Humphrey, and four years after the College went into operation. Professor Snell became connected with it the same year as myself. Consequently we can reckon as our pupils, one thousand and forty-one of the one thousand and ninety-four who have graduated here.

The only buildings erected when we commenced our labors, were the middle and south colleges, with a sort of pyramidal tower in front of them, containing a small bell, while the village church stood upon the spot now occupied by the cabinet. You may wonder where we found a chapel, a laboratory, a philosophical lecture room, and cabinet. The fact is, one room with an adjoining closet, was made to subserve all those purposes. It was in the fourth story of the middle college—the same room now occupied by the Alexandrian Society. There, morning and evening, all college assembled for devotions. In the intervening period, the Professor of Philosophy, or myself, made preparations for our lectures, and delivered them. I thought, however, sometimes, that the students at evening prayers, were more deeply affected by the mephitic gases that had been generated in the room during the day, than by the religious services.

In other respects the facilities for instruction in my department, were no better than the lecture room. The chemical apparatus was not of the value of ten dollars, and of natural history collections, there was absolutely nothing, if I rightly recollect. The work before me then I found to be, first to secure a laboratory and cabinet, and then to fill them with chemicals, and specimens in the various departments. In 1826, the chapel building was erected, and thus the rooms were provided; but to fill them with apparatus and specimens, has been the work of nearly thirty years. In 1848, the new Cabinet and Observatory was completed, more than tripling the

space for specimens, and yet the rooms are all now filled ; and we never, perhaps, so needed a new cabinet as at this moment.

I have said that to collect and arrange these cabinets, has required near thirty years ; more properly I might say, it has required seventy-five years. For in fact, three individuals have devoted as much as twenty five years each, of the most active part of their lives to this work ; and providence has led them to bring together the results of their labor on this eminence. Here they have placed not less than six thousand of the most choice specimens of minerals ; over twenty thousand rocks and fossils ; some five thousand species of plants ; two thousand specimens of vertebrated animals ; two hundred of radiated animals ; five thousand species of articulated animals ; and eight thousand species of shells ; forming, in several departments, richer collections than any in our country. And these have been chiefly obtained without expense to the college, save in providing cabinets for their exhibition, and the expenditure of three hundred dollars annually, a few years past, for their increase and preservation ; made a condition of the noble gift by Professor Adams, and indispensable to prevent such large collections from deterioration. Their whole value cannot be put less than some forty thousand dollars ; the gratuitous use of which the college enjoys. Indeed, a large proportion of these collections have been already presented to the Institution, and I trust that none of them will ever leave its walls.

Equally gratifying has been the progress of facilities for instruction in chemistry. This is specially true since the Laboratory has been so well fitted up, not only for demonstrative, but for analytical and applied chemistry, by Professor Clark ; and its walls covered by the fine collections of apparatus deposited by Professors Shepard and Mallet.

Equally obvious is this progress in the philosophical cabinet, now so ample, and so admirably exhibited, through the skill and industry of Professor Snell, faithfully devoted to this

object for a quarter of a century. What a contrast does it now present to that handful of instruments that were once stowed in a closet in the fourth story of middle college.

The other departments in College, the literary, psychological and moral, demanding but little of apparatus, cannot exhibit the same kind of progress as the scientific. Nevertheless their advancement has been equally, I might perhaps say in respect to some, more marked. Take the classics for instance. I do not doubt that quite as much proficiency is now required in Latin and Greek to enter the Sophomore class, as was formerly attained at graduation. Nor has such an elevation of the standard of scholarship been secured but by the eminent ability and untiring industry of the several gentlemen who have had charge of those departments.

The library is one of the essentials of a good college, in which all the departments feel an almost equal interest. And here too, thirty years have witnessed great changes. Then, a few hundred volumes, gathered chiefly by donation from the scanty collections of clergymen and others, occupied another room adjoining the chapel-laboratory, in the fourth story of middle college. Nor were the additions of much consequence till the year 1830, when an interesting movement on the subject of temperance opened the way for the first important effort on this subject that occurred. John Tappan, Esq., of Boston, one of the earliest, most consistent and effective pioneers of temperance in our land, proposed to the members of College, that if they would form a society, whose members were pledged against the use of ardent spirit, wine, opium and tobacco, he would present them with five hundred dollars, to be used as they thought fit. The members of College,—although such a pledge at that day, was far in advance of public opinion, formed the society, but refused the donation, lest they should seem to have been bribed. Mr. Tappan then gave the money to the College, for the purchase of books. This stimulated other friends to contribute over three thousand dollars for the same object, and being judiciously expended by

Prof. Hovey in Europe, it furnished us with a most valuable commencement of what, I doubt not, is ere long to become a large library.

And I may as well give the results of that temperance movement. For twenty-four years I have acted either as Secretary or President of the Antivenenean Society then formed, and have presented the pledge to nearly every class. The consequence is, that the roll now contains the names of eleven hundred and sixty officers and students, of whom one hundred and ninety-two are now members of College; a number greater by two hundred and twenty-seven, than has graduated here since 1829. That some have violated the pledge, I doubt not; for there are always men in every community, whose word and sacred honor are not strong enough to resist the clamors of depraved appetite. But that the society has accomplished much for individual and the general welfare, I cannot doubt. And the double advantage which the Institution has received from this effort of a distinguished philanthropist, shows that the incidental may sometimes exceed the direct benefits of well doing.

In 1844, our library received another impulse in the establishment of the Sears *Foundation of Literature and Benevolence*, by Hon. David Sears of Boston. This requires at least one hundred and twenty dollars of the income of said bequest to be devoted annually to the purchase of books, till the year 1928, and allows a much larger sum to be used for the same purpose, if other objects do not more imperiously demand it.

About the same time, one thousand dollars were presented for the purchase of books by John Tappan, Esq., and never was a donation more opportune or more gratefully received. I find the earliest germ of the recent effort, which has resulted in the erection of our present library building, in an informal meeting of a few generous friends from Salem, when attending Commencement, and observing the leanness of our library. They started a subscription to increase it, in the hope

of attracting others to follow their example. Whether George Merriam, Esq. was aware of this, I know not, when he generously offered fifteen hundred dollars as the commencement of a subscription of twenty thousand dollars. But the late Professor Edwards, in 1850, seized upon this offer and brought the subject before the Trustees, and in consequence a committee was appointed who issued a circular to the friends of the College, inviting their assistance. The Trustees and Faculty started the subscription liberally, and by the persevering efforts of professors Tyler and Jewett, twenty thousand dollars were at length secured; the new edifice was erected; and enough new works added to cover its shelves with more than ten thousand volumes.

It is not generally understood, I apprehend, how much we are indebted to Professor Edwards for the arrangement and prosecution of this enterprise. His whole soul was in it, as I might show by quotations from his numerous letters on the subject. The ground he took was this: "Erect a stone building; in good taste; fire proof; an ornament to the College and the town, and then put in eight thousand select volumes in all departments of science and literature, and it would be a noble spectacle; the crowning act to the long series of great and self-denying efforts which the friends of the college have put forth."* Again, in regard to the location, about which it is well known there was much painful diversity of opinion, he wrote, after giving in full his objections to placing the edifice near the present college buildings, as follows: "You will pardon my zeal in this matter. I have taken a deep interest in the library and in the library building, and have had my heart on living to see a neat and tasteful edifice on the Parsons' estate,—the only good locality. Better give two thousand dollars for that property and invest the money subscribed for a building till the lot would be paid for in that way." It was this earnestness of so judicious a

* Letter of Feb. 2d, 1850.

friend that led me, more than my own preferences, to urge strenuously the adoption of his views, though obliged to thwart the wishes of other friends; and it is certainly gratifying to know, now that he is gone, that the results accord so well with his wishes and plans, though their accomplishment cost me more care and anxiety than almost any other college enterprise of the last ten years.

I must not forget to refer in this connection to the libraries of the Literary Societies in College. Those of the Alexandrian and Athenian Societies have already reached the large number of thirty-five hundred volumes each; making the whole number in the College libraries, about eighteen thousand. The Literary Societies have certainly done nobly in this respect, and are entitled to the thanks of the College and its friends.

But I must not suffer this gratifying contrast between the early and present condition of the College to pass, without adverting to the long and arduous struggles and sacrifices it has cost to place the Institution upon its present vantage ground. The earlier struggles and rebuffs encountered, have been vividly described by Dr. Humphrey, in his valedictory address. Yet, only those who were personally engaged, as he was, in this protracted war with prejudice and poverty, can realize its severity, nor how long the scales hung in uncertain balance. Let me say, what my predecessor's modesty prevented his saying, that sometimes, so driven into straits were the Trustees in those early days, that the meetings were more devoted to prayer, than to the actual adoption of particular measures. Nevertheless, the enterprise of establishing a new college was popular out of the sphere of local and religious prejudices; and the appointment of one as its President, so well known and confided in by the religious public for his wisdom and piety as Dr. Humphrey, attracted great numbers to its walls. When he entered upon his office, the number of students was one hundred and twenty-six, which, in eleven years, rose to two hundred and fifty-nine. Such an in-

flux compelled the Trustees as it were, to make outlays for the means of instruction beyond their slender pecuniary resources. They were hence involved in debt, and obliged to be almost constantly before the public, soliciting aid. This course began to turn the popular opinion against the College, and our numbers diminished. In nine years,—from 1836 to 1845, it sunk to one hundred and eighteen. It was at this period of painful depression that I was called to the Presidency, after several gentlemen from abroad had been in vain solicited to assume the office. It was no feigned modesty that led me to shrink instinctively from such an office, and especially under such circumstances. I have, indeed, too much ambition in my nature, but this office I never aspired after. I was conscious of a constitutional unfitness for it. And, moreover, my health had long been in so depressed a condition, as seemed imperiously to demand a relief from care and labor, rather than the assumption of a double load. Nearly twenty years before, I had been dismissed from a beloved church and people on the ground that my health was insufficient for ministerial duties there. I accepted the professorship of Chemistry and Natural History in Amherst College, in the hope that the more active duties of such an office might enable me to do a little for a few years in the cause of science and religion. For several years such was the effect; yet at length my old complaints gathered new strength, and after having given nineteen annual courses of lectures on Chemistry and Natural History, without a single failure, I felt it indispensable that I should have release for a time, and had begun to make arrangements for a foreign tour; and some friends in London, as a means of defraying my expenses, had already announced a course of lectures to be given by me in that city. But when I came to look the question of duty fairly in the face, I was forced, in spite of the state of my health and strong reluctance, to buckle on a closer harness and assume heavier responsibilities than I had ever done. Yet it was understood, certainly by myself, that I assumed the responsibilities only

during an exigency through which the college was passing; to be released whenever that exigency should be successfully gone through.

Perhaps I may be allowed to say here, that in assuming this office, I made a sacrifice, unknown to the world, but in my own feelings greater than any I have mentioned. For more than twenty years I had been turning my attention to the connection between science and religion, and making it the chief point at which I aimed; hoping, before I should die, to bring out in systematic form the results of my life-study. I perceived, that if I accepted the Presidency, that object must be abandoned; as in fact it has been. For the sands of my life are too nearly run, I fear, to resume it now; and so I must leave only disconnected fragments of what I had hoped to bring out in a perfected system. But when I saw how much more important was the welfare of this Institution than any of my literary plans, or health, or even life, I yielded to what seemed duty; nor does my decision appear erroneous as I look at it in retrospect. God has shown me that He knew better than I did what it was best for me to do.

But when I assumed this office, how faint, to human view, did the prospect seem that I should live to see any essential changes for the better in the condition of the College! For in spite of the arduous labors and sacrifices, and I may add success too, of our general agent, Rev. Dr. Vaill, we had been sinking deeper and deeper in debt, for many years; and the public were becoming very nervous under our solicitations for aid; whilst almost all those improvements and additions, which a college in the nineteenth century requires, must be neglected. But I knew, my colleagues to be not only eminently qualified as instructors, but true-hearted Christian men, who were willing to submit to any necessary sacrifice to accomplish an important object. And if we took hold of the work with but feeble hope, we had an iron will. Two things seemed to us essential to begin with: one was, to stop the College running any farther in debt. Another was, to cease

soliciting aid from the public, at least in a promiscuous way. With these two conditions, therefore, the Faculty offered to take the College upon their own shoulders, and to receive no regular salaries; but only the ordinary income, which we knew would fall short of our regular salaries by some two thousand dollars. It did so; but it stopped the downward course of the College, and turned, to some extent, the prejudices of the public into sympathy for us. Still we could make no improvements: our debt pressed heavily upon us; we found it difficult to eke out our deficient salaries; and though our numbers slowly increased, the College seemed to my dejected spirits to be sinking deeper and deeper into the mire, and I became at length entirely satisfied that Providence did not at least intend to make use of my instrumentality to bring it relief. Oh how little did I suspect how near that relief was, and how simply and easily God would alter the whole aspect of things! Indeed, when the change came, it seemed to me as obviously his work as if I had seen the sun and moon stand still, or the dead start out of their graves; and it appeared as absurd for me to boast of my agency in the work, as for the wires of the telegraph to feel proud because electricity was conveying great thoughts through them. Oh no; let the glory of this change be now and ever ascribed to a special divine Providence.

In the discouraging circumstances in which I was then placed, as already described, I came to the conclusion that I must resign my place. Yet I felt apprehensive that in the condition of our funds, no one worthy the place would feel justified in assuming it, with no certain means of support. I therefore determined to make an effort to get a professorship endowed. And where was it more natural for me to look, than to one who only a short time before had cheered us by the endowment of a professorship; and who, I trust, will pardon me for detailing a few items of private history, not so much because they illustrate his liberality, as because they show still more the Divine Interposition and Beneficence.

It had become so common a remark among the officers of Amherst College, that if any respectable friend should give us fifty thousand dollars, we should attach his name to it, that I felt sure it would be done; and I recollected too the last words of Professor Fiske, when he left us: "Amherst College will be relieved: Mr. Williston I think will give it fifty thousand dollars, and you will put his name upon it." I felt justified, therefore, in saying to him, that if his circumstances would allow him to come to our aid in this exigency, by founding another professorship, I did not doubt that such a result would follow. He gave me to understand that in his will a professorship was already endowed, and that he would make it available at once, if greatly needed. Nay he offered to endow the half of another professorship, provided some one else would add the other half. But as to attaching his name to the College, he felt unwilling that I should attempt to fulfil that promise, certainly during his life. Be it so; but how can I avoid bearing my solemn testimony to the obligations that will rest upon those who come after me, to fulfil my promise at the proper time, if they would escape the curse that follows ingratitude and forfeited faith.

The half professorship thus offered was soon made a whole one by Samuel A. Hitchcock, Esq., of Brimfield. And oh what a load did these benefactions take from my mind! For several years each returning Commencement had seemed to me more like a funeral than a joyful anniversary: for I saw not how the downward progress of the College was to be arrested. But now with the addition of thirty thousand dollars to our funds, I began to hope that we might be saved. But the kindness of Providence had other developments in store for us.

These events occurred in the winter of 1846, while the Legislature of Massachusetts were in session. We had often appealed to them unsuccessfully for help; and I feared that when the generous benefactions of individuals should be made public, we should seek in vain from that quarter for

the aid which in justice should be given us. I therefore requested permission of the Trustees by letter to make one more application to the Government. They allowed me to do it, and the result was a donation from the State of twenty-five thousand dollars. The passage of the Resolve met with less opposition than on former occasions. Perhaps the following incident, communicated to me by a member of the Legislature, may appear to the Christian to be connected with this fact.

The Bill for aiding Amherst College came up on Saturday, and met with strong and able opposition, so that its friends trembled for its fate. On Saturday evening a few members of that body were in the habit of meeting for prayer. That evening the bill for aiding the College formed the burthen of conversation and of supplication, and each one agreed to make it the subject of private prayer on the Sabbath. Monday came; the bill was read; but to the amazement of these praying men, opposition had almost disappeared, and with a few remarks it was passed. How could they, how can we, avoid the conviction that prayer was the grand agency that smoothed the troubled waters and gave the College the victory after so many years of bitter opposition and defeat!

In 1846, also, Prof. Shepard offered to deposit in the College his splendid collections of minerals, meteorites, fossils, and animals, provided a fire-proof building were erected for its reception. Conscious that such an offer ought not to be neglected, I made the effort to obtain the requisite funds. But I should probably have failed, had not the Hon. Josiah B. Woods come to my aid. By his judicious plans and persevering personal efforts, nine thousand dollars were ere long secured; enough to erect not merely a mineralogical but a geological cabinet, and an astronomical observatory. There seemed, indeed, but a faint prospect that the latter, when it was erected, would be supplied with but a few of the requisite instruments. Yet at the time of the dedication of the building, in 1848, I remarked that "we should be very faith-

less and ungrateful to doubt that the same Providence, which has done so much for us the past year, will send us a fitting telescope, if it be best for us to have one; and send it too just at the right time." This prediction, through the liberality of the Hon. Rufus Bullock, has been fulfilled; and a noble telescope has just been placed in yonder dome, which, through the great skill and indefatigable industry of Alvan Clark, Esq., who has constructed it, is one of the finest instruments of its size that ever graced an observatory; and its mounting has some important improvements never before introduced. In the hands of Mr. Clark, it has already introduced to the astronomic world two new double stars, never before recognized; one of which is probably binary. This discovery has already been confirmed and acknowledged by one of the most accomplished observers in Great Britain. May we not hope that this glass will perform another service for science, by stirring up some generous heart to endow a professorship of astronomy in our college at no distant day. This certainly is at present one of the most pressing wants of the Institution. It is not creditable that the noblest of the sciences should be bandied about like an intruder, and be scarcely recognized in our catalogue.

When we erected the new cabinet we had no idea that such an influx of specimens awaited us, so that thus soon all our museum rooms are crying out, "the place is too strait for us." In 1847, Prof. Adams presented the College with his rich collections in zoölogy, which, before his death, he had more than doubled; so that Prof. Agassiz says of it, "I do not know in the whole country a conchological collection of equal scientific value;" and Dr. Gould says, that "as a scientific collection it is not equaled in some respects by any collection in the world." Yet this fine collection is spread into three apartments, and is imminently exposed to fire. To secure a new building to receive it, with the still more exposed collection of fossil footmarks, has been long with me an object of strong desire and effort; and it is among the deepest of

my regrets on leaving the Presidency, that it remains unaccomplished.

Thus had I written only a few days ago, and thus had I expected to leave this subject to-day. But kind Providence has ordered otherwise. Last evening a letter was received, announcing the gratifying intelligence that the Trustees under the will of the late Hon. Samuel Appleton of Boston, had appropriated only ten days ago, ten thousand dollars of the sum left by him for scientific and benevolent purposes, to the erection of another cabinet,—the *Appleton Zoölogical Cabinet*, by the side of the Woods Cabinet, on yonder hill. The Trustees have accepted the noble gift, and will proceed at once to rear an edifice from the granite of our mountains, that will bear the name of Appleton ;—a name already familiar in the annals of science and benevolence,—to the remotest posterity.

But to return to the history of the College.

It was in 1847, likewise, that Hon. David Sears added twelve thousand dollars to the ten thousand previously given to constitute the “*Sears Foundation of Literature and Benevolence* ;” a bequest which will at a future day, form a source of income to the College surpassed by no other funds.

Thus in little more than a year, did the College come into possession of funds and buildings to the amount of eighty thousand dollars ; and of collections, whose value is but poorly expressed by money. Our debts were cancelled, and available funds enough left to enable us to go on with economy from year to year, and with increased means of instruction. The incubus that had so long rested upon us, was removed ; the cord that had well nigh throttled us, was cut asunder, and the depletion of our life-blood was arrested. Those only who have passed through such a season of discouragement and weakness, can realize with what gratitude to God and our benefactors we went on with our work. It seemed to us, and does still, a special act of Divine Mercy, and not the result of our wisdom or effort. We could not otherwise account for it, that the hearts of so many generous friends should have been

simultaneously opened to help us, when again and again we had sought the same aid in vain.

Under such circumstances, as we might expect, our numbers have gone on increasing, until I am now able to say, that it is double what it was when I assumed the Presidency. But numbers merely, however large, do not prove that the Institution has accomplished the noble objects proposed by its founders. These objects were distinctly stated by them to be, first, to "found an Institution upon the broad principles of charity and benevolence, for the instruction of youth in all the branches of literature and science usually taught in colleges;" and secondly, to raise a fund, of at least fifty thousand dollars, "for the classical or academic and collegiate education of indigent young men of promising talents and hopeful piety, who may desire such an education, with the sole view to the christian ministry." See now the results up to this period.

In his valedictory Address, delivered in April, 1845, Dr. Humphrey stated that the College had then enjoyed seven marked revivals of religion: viz., in 1823, 1827, 1828, 1831, 1835, 1839 and 1842. To this list I am now able to add three others; in 1846, 1850 and 1853. This is one for every three years and a third; and the interval has never exceeded four years. So that it is still true, as Dr. Humphrey stated when he left, that no class has ever graduated here that had not passed through a revival. It might also be stated that besides the ten prominent revivals above named, many other seasons of special interest have been enjoyed by the church, in each of which some souls have been hopefully converted; but these were not dignified by the name of revival. In those thus designated, the average number of converts has been from twenty to thirty; and according to the laborious investigations of Professor Tyler, not less than two hundred and fifty, probably three hundred, of the members of College have obtained the Christian hope while resident here: that is, one sixth or one-seventh of all who have been connected with the

Institution; the whole number upon our books being two thousand and five.

In all these ten revivals, excepting the first under Dr. Moore, it has been my privilege to be present and to participate in the labors connected with their progress; and even at the close of the first, I preached a sermon at the conclusion of the term. Did time permit, I should be glad to detail some of the scenes of deep interest developed by the operations of Divine Grace. For I had opportunity to witness the struggles between grace and nature, and the final triumph of the former, in the heart of many who have since become eminent as ministers and missionaries. How instructive was it, for example, to witness the steady and strong opposition of heart in the missionary martyr, Lyman; till, arrested by the spirit of God, he showed a like steady opposition to personal submission to the claims of God, until subdued at length the whole current of his soul turned into the right channel, and the man seemed not only morally changed, but his intellect also apparently doubled in power, and he went as steadily at work for God as he had done against him, until he took the martyr's crown.

There was one scene of a very peculiar character, which I always supposed was decidedly instrumental in bringing on one of these revivals, that I ought, perhaps, to rescue from oblivion. Every one conversant with seasons of special religious interest, knows that often it seems long uncertain what will be the result of an awakened state of feeling in respect to spiritual things, until, at length, some slight circumstance turns the scale one way or the other. In 1835, when I acted as the *locum tenens* of Dr. Humphrey, who was absent in Europe, we were in this state of awakened interest and anxious expectation. The non-professors of religion in college, actuated I know not by what motives, had invited Mr. Burgess, then tutor and now missionary in India, to conduct a weekly religious meeting for them alone. He occasionally invited other members of the Faculty to assist him at these meetings. I was

making some remarks at one of them, when suddenly a train of gunpowder, laid all around the room, and which must have contained some pounds, exploded, filling the upper part of the room with smoke too dense to breathe in. Perhaps it was providential that one was conducting the meeting who had for nearly ten years been familiar with all sorts of detonations in a chemical laboratory, and who was not therefore, greatly disturbed by this new example. Recollecting that the opposite room, now the Zoölogical Cabinet, where I was daily lecturing, was filled up with seats, I invited my auditors to repair thither, and we finished the meeting, which, as may well be imagined, became at its close, intensely solemn. It was the decisive blow that ushered in the revival, although intended to put it down, by Satan, its instigator. I well recollect that at the time of the occurrence, I felt almost sure that a revival would follow such unwise over-acting on his part. It was so; and I may add, that the unfortunate young man, who set fire to the train, till then of unblemished character, was in less than an hour, brought before the Faculty, who had no alternative but to inflict the highest college censure upon him.

But to return from this digression; we have seen that the leading object with its founders and patrons, has been to raise up ministers and missionaries. The following table, showing what proportion of the graduates of most of our northern Colleges have entered the ministry, will exhibit the standing among them, of Amherst, in this respect, up to the year 1852.

In Amherst College, one in 2.19 of its graduates had entered the ministry.

In Middlebury, one in	-	-	-	-	2.31
In Vermont University, one in	-	-	-	-	3.10
In Williams College, one in	-	-	-	-	3.13
In Hamilton, one in	-	-	-	-	3.7
In Yale and Brown, one in	-	-	-	-	3.8

In Dartmouth, one in	-	-	-	-	-	3.9
In Harvard, one in	-	-	-	-	-	4.2
In Princeton, one in	-	-	-	-	-	5.4
In Bowdoin, one in	-	-	-	-	-	5.6

The proportion of foreign missionaries in a few of the northern Colleges, up to 1852, was as follows :

Amherst, one in	-	-	-	-	-	23.5
Middlebury, one in	-	-	-	-	-	36.3
Williams, one in	-	-	-	-	-	40.0
Dartmouth, one in	-	-	-	-	-	106.

The yearly supply of ministers from several northern Colleges, up to 1852, taking the whole period of their existence into the account, has been as follows :

Amherst,	-	-	-	-	-	-	15.
Yale,	-	-	-	-	-	-	10.3
Middlebury,	-	-	-	-	-	-	7.8
Williams,	-	-	-	-	-	-	7.2
Dartmouth,	-	-	-	-	-	-	7.0
Harvard,	-	-	-	-	-	-	6.9
Princeton,	-	-	-	-	-	-	5.3
Brown,	-	-	-	-	-	-	5.1
Vermont University,	-	-	-	-	-	-	1.6

The whole number of our graduates to 1854, has been one thousand and ninety-four ; of whom four hundred and seventy-nine have become ministers, and fifty-one foreign missionaries. Among the undergraduates there has always been a decided majority of professors of religion. The number the present year is one hundred and fifty out of two hundred and thirty-eight, or nearly two thirds.

So much for the success of the first grand object of the founders of the Institution. A few of those who were the

The preceding statements show the wisdom and benevolence of the founders of the College, in making the Charity Fund the basis of their operations. It has met most happily the wants of a meritorious class of young men, who, with the piety and disposition necessary to do good, lack the pecuniary ability. In connection with the aid proffered by the American Education Society, many a youth has obtained a public education who was literally destitute of means. It has already sent hundreds into the ministry, through a regular course of education, who would otherwise have been obliged to abandon the effort, or have taken some shorter route. This fund, moreover, has proved the sheet anchor of the Institution, especially during the trying exigency in its pecuniary condition which I have described. It was not, however, till a suggestion of Prof. Fiske led the Trustees to announce in their annual catalogue, that the entire regular term bills of all who came with proper credentials would be remitted, that the existence of the fund became generally known, or a large number availed themselves of its aid. True, the income of the fund does not always meet the term bills of the beneficiaries. But this is no pecuniary loss to the College, while it carries out more perfectly than any other plan, the intentions of those who procured this fund. Moreover, the time is not distant, when its income will more than make up any deficiency that may occur. For already it has increased by the addition of one-sixth of its income to the principal, to fifty-six thousand dollars; and the Stimpson Fund, estimated at not less than fifteen thousand dollars in value, is devoted to the same object, although for the present it produces only two hundred dollars annually. So too the legacy of Dr. Moore is to be turned into the same channel. It is obvious, therefore, that this fund will ere long be so large as to meet, and more than meet, all applications. Would that some benevolent gentleman might commence a similar fund for other meritorious scholars, who, though not looking to the ministry, neverthe-

less deserve assistance. Many such I have known to abandon College for the want of such aid.

I know there is a strong prejudice with many respectable men against this whole system of charitable aid; and not a few stories are in circulation about the extravagance of many who receive it. But I could wish that such had been familiar with the desperate struggles, the painful sacrifices, and almost miser-like economy, to which many are obliged to submit in order to work their way through College. But this is a history as yet unwritten, although it has fallen largely under my observation, since I have been connected with this College. I will give an example or two, of the expenses and modes of meeting them, of a few young men, who are now on their way to heathen shores, or about to go, and who received the aid of our fund and of the Education Society. These items were furnished at my request.

One of them gives the cost of fitting for College at East-hampton as follows :

First year's Board,	-	-	-	-	-	-	\$14
Incidentals,	-	-	-	-	-	-	15
							—\$29
Second year's Board,	-	-	-	-	-	-	\$21
Incidentals,	-	-	-	-	-	-	13
							—\$34
Total,	-	-	-	-	-	-	\$63
for two years.							
Term Bills,	-	-	-	-	-	-	\$49
							—
Total,	-	-	-	-	-	-	\$102
Earned during that time,			-	-	-	-	\$75
							—
Deficiency,	-	-	-	-	-	-	\$27

In College his expenses were as follows :

Board, four years, - - - - -	\$83
Incidentals, - - - - -	114
Travelling expenses, - - - - -	25
<hr/>	
Total expenses, - - - - -	\$222

This individual boarded himself most of the time, or joined a boarding club; the expense varying from forty to sixty-seven cents per week.

Two other individuals, who came from a distance of three hundred miles, give their expenses for each one as follows, for two years and one term.

Board, - - - - -	\$56 40
Books and Stationery, - - - - -	50 00
Clothing, fuel, lights, &c., - - - - -	68 00
<hr/>	
	\$174 40
Travelling expenses, - - - - -	60 00
<hr/>	
Total, - - - - -	\$234 40
Received from the Ed. Society, \$180 00	
For personal services, - - - - - 55 00	
<hr/>	
	\$235 00

Neither of these three individuals was absent from College during term time for school keeping, or other purposes. They graduated honorably, and with the entire confidence of all acquainted with them. Their cases may seem of an extreme character: but I have found many such, and knowing that their education was a leading object for which the Institution was founded, I have felt it to be an imperious duty to help them through their noble struggle. May this object never be lost sight of here: for if, by increasing the expenses of an education, or withholding any possible aid, such young men are driven away, a leading object of the Institution will be de-

feated. Even school-keeping, with all its evils, had better be allowed, than such a perversion of the intentions of its originators. I make these remarks, because, as an institution grows older, and its means increase, there is always a strong tendency to render its advantages more expensive. Against this tendency I have struggled with all my might, both by words and example, and my prayer is, that it may always be resisted more manfully and more successfully than I have done.

I hope I may be pardoned for suggesting to those who come after me in the management of this Institution, a caution on one or two other points, which experience, some of it very bitter, has shown me to be of vital importance.

I would suggest first, how indispensable it is that a College like this, should avoid running in debt. This is more important, in my opinion, for a literary institution than for an individual. Yet the temptation to do it is stronger for the college than the private gentleman. When some great improvement seems very important, Trustees are apt to feel that some wealthy and benevolent individual will be found to assume the debt. But it is usually a broken staff to lean upon; for most men of this description are much more inclined to give to an institution out of debt, than to one thus burdened. Better, in my opinion, to omit all improvements requiring money, nay to reduce the corps of instructors one-half, than to make drafts upon the treasury which cannot be honored without borrowing. Happy and safe is that institution, whose treasurer is peculiarly sensitive on this point, and who is not satisfied merely to be free from debt, but who is anxious to have on hand at least a small reserve fund for unlooked-for losses and exigencies. Let Amherst College never forget the bitter experiences on this subject which her past history discloses.

But a point of still higher importance relates to her religious interests. We have seen that amid all the reverses of the outward condition of the College, there has been great uni-

formity in its general religious character. Adversity has served rather to make us feel our dependence upon God, and spiritual blessings have come down upon us in richer abundance in our days of darkness. But with increasing outward prosperity comes a strong temptation to trust in ourselves, and depart from Him. Indeed, it requires but a small measure of worldly success to ruin an individual, or an institution ; as the whole history of the world loudly proclaims. Already on this point, I am jealous over this Institution with godly jealousy. But oh, the unspeakable importance of keeping the standard of piety high in such a spot. Let revivals cease here, let a sordid and formal piety prevail, let error become triumphant, and worse than frustrated will be the aims and the efforts of those who have here labored and prayed to connect pure religion with sound learning.

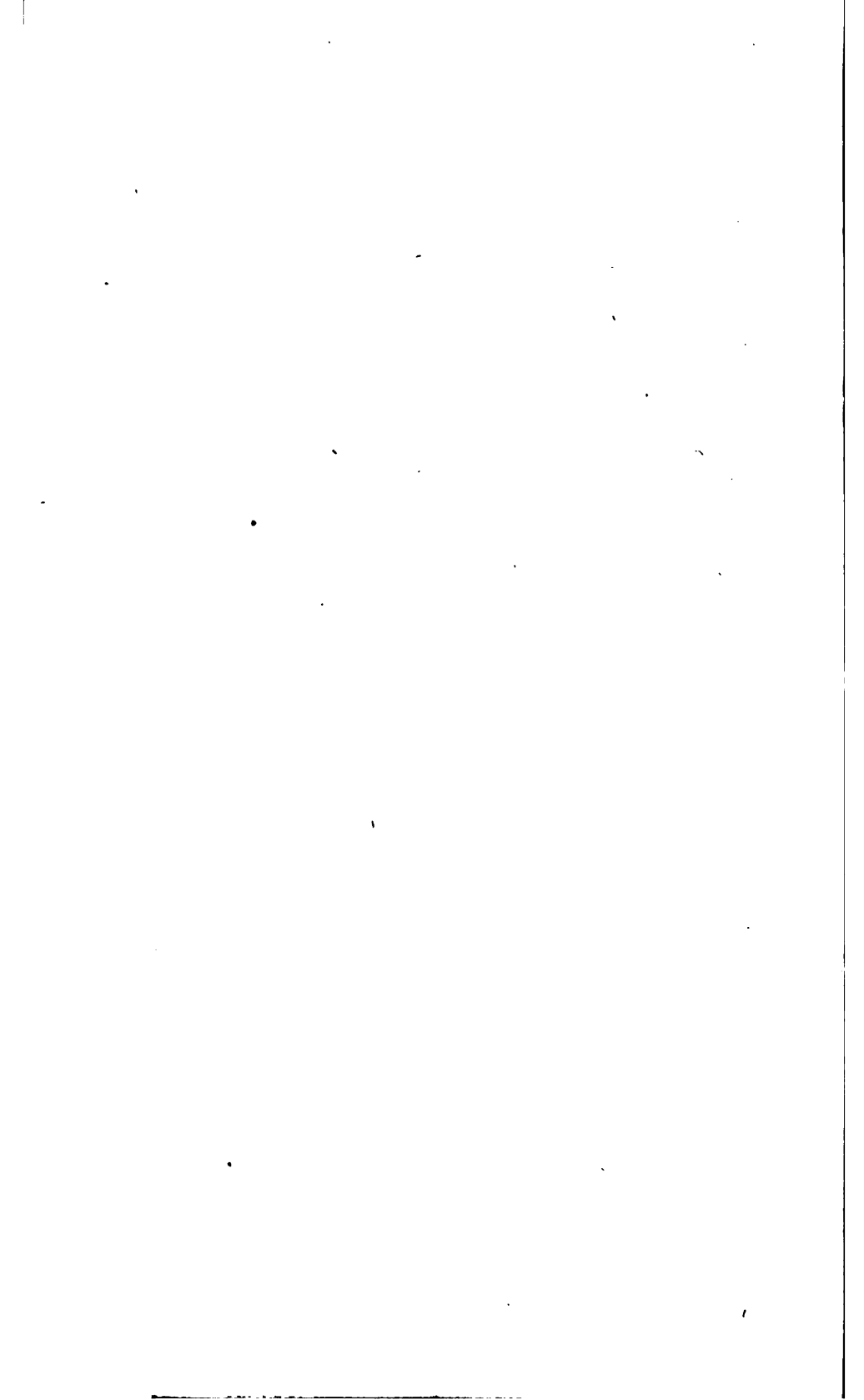
But I must leave this highest of all the interests of the College, and indeed all its interests, in the hands of God. From this hour I cease to preside over its interests, and take a much humbler sphere. I thank God that He has allowed me to labor so long and to see so much of his special mercy here. I can say with Richard Baxter, that I have now lived forty years beyond the time when I would gladly have accepted of Hezekiah's lease of fifteen. And these years, when I have lived as it were upon trespass, have been the most important of my life. True, they have been years of hard labor, and some of them so full of cares and responsibilities, that often the weary and anxious day has been succeeded by the sleepless night. And though a constitution seemingly broken down thirty years ago, past recuperation, has held out far beyond all reasonable expectation, yet for several years, I have felt unable to do any thing like justice to the duties of the Presidency ; and therefore I have asked, and at length obtained, a release. But it is not, as the newspapers have announced, that I might retire upon an ample income, and spend the residue of life without labor. I withdraw, because I have long been satisfied that the good of the College imperiously de-

mands that its presidential duties should pass into younger and more vigorous hands. But it is my wish and intention to labor, here or elsewhere, as shall please Providence, to the full extent which my constitution will bear, and to the end of life. Nay, I am under the necessity of laboring in whatever way I can, to obtain the means of living, and to meet the claims of benevolence. To accumulate property has not been the object of any part of my life. And whatever pecuniary means I possess, have been the incidental effect of God's blessing upon rigid economy, industry, and plain living: But they are insufficient for the comfortable support of myself and family in old age. Yet, on this subject I feel no special anxiety. I have seen too much of God's providential kindness in times past, to doubt its continuance to the end, if I do my duty. It would, indeed, be folly in me to expect to accomplish much more, either for others or myself; or to anticipate a serene and quiet old age. It is for those with ample means and unimpaired constitutions to hope for such a close to the day of life. But one, who, like myself, has sustained a forty years' contest with disordered nerves, and who, as he looks back, can see lopt-off fragments of himself, strewed over the wide battle-field, such a one ought to know that these complaints usually gain a complete mastery in advanced life, and make existence a burden. No, no, though God may be better to me than my fears anticipate, yet, at the age of threescore and two, and with such a constitution, it is not for me to calculate upon much more of enjoyment in this world. But I do sigh for more of time and leisure, to get ready for the employments and enjoyments of a higher state of being. I have now reached what Dr. Chalmers calls the sabbath of life, and it is meet that I should lay aside some of the engrossing cares and labors of the week, and find leisure for contemplations and actions more appropriate to life's closing scenes.

Under these circumstances, how peculiarly gratifying is it, as I leave my post, to find one ready to assume it, in whose Christian character, learning, ministerial ability, and correct

judgment, not only myself, but the Trustees, the Faculty, and the public, have entire confidence. I turn, therefore, to you, my beloved brother, and by the direction of the Trustees, and with the simple act of presenting you with the keys and the seal of the Institution, delivered to me by my predecessor, I induct you into the Presidency of Amherst College. Simple though this ceremony be, our hearts are in it. These venerated Trustees, whose unanimous invitation you have accepted, cordially welcome you to this new and important field of labor. And so do my respected colleagues, whose unanimous wish you have gratified by your acceptance of the office. I can assure you, also, of a hearty welcome from the two hundred and thirty young men before you, who wait the moulding influence of your instruction. Nor ought I to forget to extend a welcome to you, from the citizens of this place, whose good wishes and kind offices have always been enjoyed by the College, and are so important to its welfare. We know, indeed, that the post you assume to-day, is one of no ordinary care and responsibility. But I hardly know of the station where fidelity is so soon and so liberally rewarded, and where a man can do more for the glory of God and the welfare of the world. The material you have to work upon here, is of the choicest kind. The parents of these their sons, use no exaggerated language when they say to you, these are our jewels. For when cut and polished, you will find them almost without exception, gems worthy to take a place in the crown of your country and your Redeemer. Now and then, indeed, one will appear in such a community, so coarse by nature, and so debased by low aims, and appetites, and passions, that no human skill can convert him into a scholar or a gentleman. But in the character of almost all who come hither to drink at the Castalian fount, you will find a solid foundation of talent, correct moral principle, and correct habits; and in their bosoms, aspirations and aims of the noblest character, to which you need not fear to appeal in support of any worthy cause. At east, so have I found it with nearly all of the two thousand

with whom I have been connected here. And it is but justice, not flattery, to say, that were I in search of a forlorn hope, either for the defence of my own life and interests, or the cause of learning, of liberty, of temperance, or of religion, I know not where I should look with so much confidence for efficient volunteers, as to the present members of Amherst College. I trust, Sir, that it will need no very protracted experience to satisfy you that this encomium is deserved. May God give you eminent success in carrying forward this noble enterprise of linking together by indissoluble bonds, and identifying learning and religion. May the future of this College show that it has done more in this blessed work, than the most sanguine expectations and the strongest faith of its founders and patrons ever anticipated.

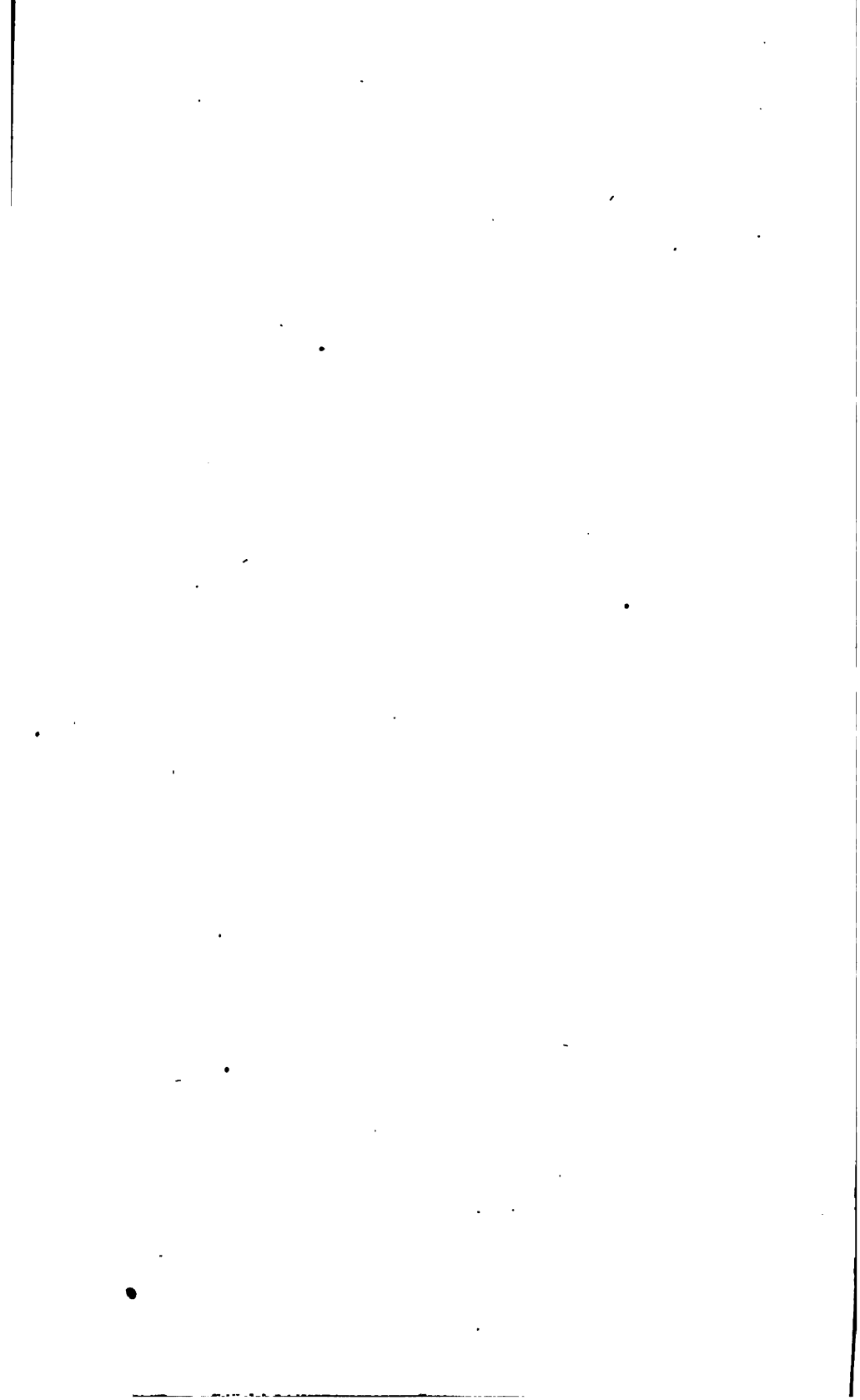


L A T I N O R A T I O N .

BY

HASKET DERBY,

of the Senior Class.



ORATIO.*

MORE antiquo et venerabili, ad ritum augustum conficiendum, ad munus grave fungendum, in concionem hodie convenimus. Ter in spatio triginta volventium annorum ad curationem amplam a curatoribus honoratis vocatus est novus Præses, ter magistratus vestibus indutus solemnitate conveniente inductus est, terque novo officio constitutus auditorum amicorumque voces assentientes et lætas salutationes audivit. Quartum hodierno die, recentem principem in hujus institutionis senatum academicum, cum honoribus nuper additis introducere est nostrum, ac præceptorem magistrumque novi discipulorum ordinis, novæ congregationis sacerdotem patremque salutare. Hodie quoque illum virum doctum et honorandum, qui huic Collegio tam longe præfuit, laboribus oneribusque suis liberare, nostrum munus triste est; quem alteri selam concedere et in officium modestius decore recedere mox videbimus. Itaque illi mœste valedicimus, dum successorem, tanquam patrem nostrum amicumque novum, lætissime salvere jubemus.

Ad conficiendos hos ritus, ad fungenda hæc munera, quam dignus conventus præsens! Huc permulti alumni, quos mater sua colere semper gavisa est, convenerunt; viri summa doctrina insignes, liberalissimis studiis ornati, elegantia perpolita et ingenio præstantes. Hic sunt qui eruditione pariter

* This oration was prepared in haste with only a fortnight's notice, and has never been seen by the head of the department.

copiosa potiti, et a cultu pariter consummata, alius sub alia Alma Matre instituti fuerint. Hic multa religionis lumina sunt, quorum praecepta illuminent, et exempla animas hominum stimulent. Hic etiam beneficorum venerabiliumque illorum pauci sunt, quorum nomina huic institutioni tam longe sunt conjuncta, ac fama in hominum memoria manebit, dum hæc sapientiæ sedes durabit. Pulchritudo quoque hanc aulam decorat, et præsentia assensuque suo illustrat. Si hic literæ apte exhibeantur, quanto magis artes elegantes, cum tam multas formas imaginesque mirandas circumspiciamus. Quid spectaculum jucundius, quis conventus auspiciatior, quæ occasio præsentī faustior esse potest? Juvenes et virgines, senes et matronas, alumnos et patronos, doctos et sacros, omnes salvere jubemus!

Cur de dignitate officii hodie relinquendi iterumque occupandi copiose loqueremur? Nonne est regni latissimi provinciae administratio? Quid enim nisi provincia in literarum imperio collegium est? Cujus in finibus ii fontes sunt, quorum aquæ terram aridam reficiant. Sæcula præterita cum præsentibus temporibus conjungit. In aulis ejus ævorum revolutorum fructus conduntur. Hic, quasi in fano, sanctorum reliquiæ, vera efficacia abundantes sed fraudis fallaciæque expertes, quiescunt. Hic lucernæ fulgent, quibus Poetæ Oratoresque flammam accendunt. Hic Philosophia oculis acerrimis prædita sedet discipulosque docet, et Historia mundi annalia narrat.

Sed de Collegio nostro nunc dicamus. Pietatis et utilitatis in solo satum, benevolentiaque regiæ roribus invigoratum, in robur majestatemque accretum est. Auctorum suorum animo afflatum, veritatis consecratione atque scientiæ studio, paucos æmulatores, pauciores superiores habet. Dicere de filiis, in Ecclesia, in Civitate, in Literis insignibus, doctrina tam probatis, eloquentia tam præclaris, utilitate tam benignis nihil opus est. Haud mirandum est Almam Matrem exclamare "hæc meorum præceptorum certissima sunt pignora, hæc gemmæ splendissimæ quæ frontem meam decorent!" O nos for-

tunatos qui Collegii talis socii sint, hodie fortunatiores qui duo patres priores aspectemus et illis gratulemur, dum parentem novum salutamus, atque eam venerationem quam filios decet adhibeamus.

Te igitur, vir venerande, qui huic institutioni plus viginti annos tam sapienter attenteque præfuiſti, primum salvere jubemus. Sexcenti filii tui enumerentur, hi circum cana tempora tua corona nitens sunt, hos ad locum hodie redientes in quo educati fuerunt, imprimis gratias tibi agere magnopere delectat. Sub te beati erant olim, nunc in illis beatus es.

Nec harum salutationum in medio, in hac novi principis gratulatione, ejus adhuc ducis et amici nostri obliviscamur, qui ex insigniori administratione, ad humilium sed honestum officium nunc recedit. Tibi præcipue gratias agimus et tibi valedicimus, sed tantum ut Præsidi, non ut præceptor. Nos delectat Collegium nostrum adhuc te detinere, atque te, scientiæ lumen, illius orbem decorare et illustrare, dum orbem terrarum illuminas. Nos quoque juvat eadem idonea studia quæ juventuti placuerint, ac maturius ævum honoraverint, senectutis tuæ et solatium et gloriam futura esse.

Postremo. Gratum nobis munus est, te novum præceptorem salutare. Humanitas, elegantia, eruditio, collegii et progenies et decus sunt; quam convenientes et acceptæ, cum Præsidis in persona omnes conjunctæ sint. Præstans, sicut semper fuisti, recta scriptorum Classicorum æstimatione, a purissimis Græcis et Romanis fontibus opiniones sententiasque tuas expromens, quorum doctrinæ peritus, quorum ingenii consultus es, hodie munia suscepisti, quæ menti et elegantiae doctæ spatium præbebunt, simul ac ab iisdem ornabuntur. Hactenus vero ecclesiæ pastor fuisti, sed exinde non modo pastor, sed etiam philosophiæ præceptor et collegii Præses eris. Felix probatusque hactenus, posthac sis probatior feliciorque! Exinde non solum cor purgare animamque sanctam facere, sed etiam intellectum colere et confirmare, stultitiam punire, diligentiam ornare, opus erit. Quam illustris labor! Quam grave munus! Sed non academicarum rerum es inexpertus. Nam

Universitatis antiquæ et venerabilis sub umbra semper vixisti, atque ejusdem curator inspectorque fuisti.

“Lætus intersis populo Quirini,

Neve te nostris vitiis iniquum

Ocior aura

Tollat. Hic magnos potius triumphos,

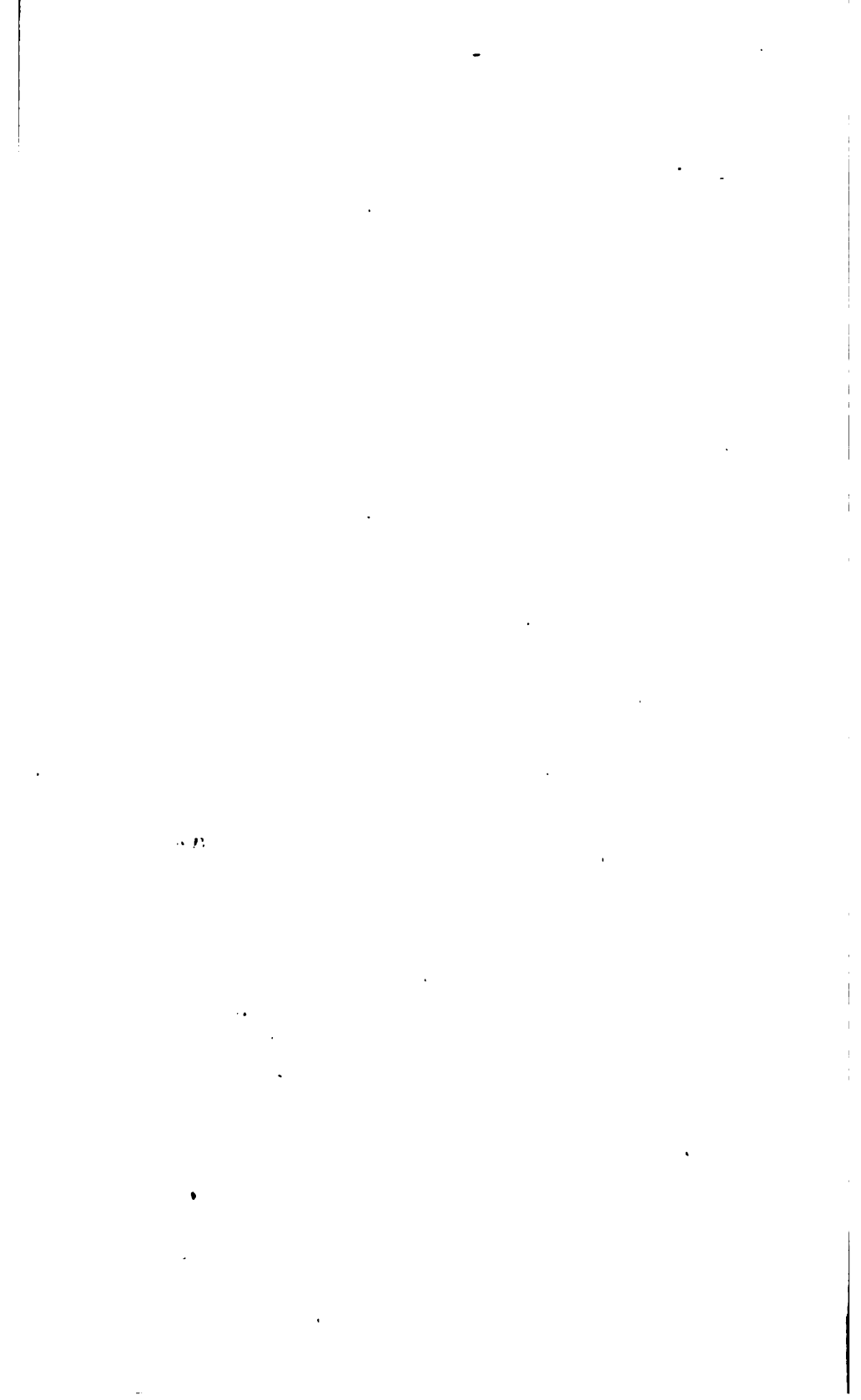
Hic ames dici Pater atque Princeps.”

Tuis manibus hanc curationem tradimus. Accipe, sacrum est pignus ; accipe, favente Deo. Observantia, affectio, honos, et gratiæ immensæ debitum sempiternum, in hac terra fidelitatis præmium erit, ac superne aurea corona sanctis sedibus in sæcula sæculorum.

INAUGURAL ADDRESS.

BY

REV. WILLIAM A. STEARNS, D. D.



INAUGURAL ADDRESS:

HONORED Guardians and Instructors of Amherst College:
Young Gentlemen enjoying its means of Improvement: Reverend and Honored of the Alumni: Distinguished Guests and Friends: accept the kindly Salutations which belong to the occasion.

Next to the creation of man, his elevation seems to be the greatest work of God. When he made the world, he adapted means, in its construction, to human improvement. History lay before him, with its long succession of centuries, like an extended map, on which every coming scene, action, event, whether great or insignificant, had its appropriate place. The differing features of the earth's surface—its elevations and depressions, its seas and commercial inlets and its rivers, were to be more or less directly the educators of man. Nor is there extravagance in the supposition, since the providence of God extends to all things, that a seat of learning on this spot, was among his purposes when he lifted up the mountains round about us, reared this classic mound in the midst of them and threw upon the scene those variegated beauties which excite the admiration of every cultivated mind.

If such was his design, in the fulness of time, it began to be accomplished. Not many miles from the spot where great Edwards preached and prayed, and the self-sacrificing Brainerd sleeps, a collegiate institution has sprung into being, and in an incredibly short period, has achieved an importance

which brings it into honorable comparison with the oldest colleges of the land.

Amherst College has had the good fortune to enjoy the confidence and benefactions of a constituency spread over a large surrounding region, and to win the regard of many wise and discerning minds in different sections of the country. It has had, it has, noble patrons whose generosity will be held in everlasting remembrance. I will not raise a deeper blush of modesty on the cheek of the present and the living—but the absent and the dead, will impute no blame, if I congratulate you on the generous bequest this day announced. Coming as it does from the assets of an American nobleman—one of a family well known both at home and in our national halls—and known to have hearts as large as their purses—apportioned to us as it was by the enlightened and liberal men whom the deceased had selected as the almoners of his bounty—it shows something of the estimate which the merchant princes of New England place on our higher schools of Education.

This college is eminently a religious, as well as scientific and literary institution. It was founded by men who felt from the bottom of their souls that the old puritan motto of Harvard, *Christo et ecclesiæ*, ought to be and should be realized in our graduates, to the highest degree. It has secured to its headship a series of presiding officers whose names are extensively honored in Church and community. Moore, under whose auspices it struggled into being, "ripe in scholarship, rich in experience," greatly confided in and beloved, was too early removed by death. As when some large and graceful elm is suddenly felled, and the cottage beneath its shades is left naked to the weather, so died the first President leaving the institution unsheltered from those scorching suns of reproach, to which its early childhood was exposed. Humphrey, who, "in the freshness and anguish of the most sacred ties just severed," was called to fill up the breach, still lingers among us, venerable in wisdom and years, everywhere loved

and everywhere honored, especially by that host of scholars now in active life, who in their successive collegiate courses enjoyed the benefits of his guiding hand, and every one of whom seems to be saying, "Let us rise up before the hoary head and honor the face of the old man." For the last decade of years and more, it has flourished under the paternal councils of a gentleman who has shone here and across the waters, as one of the brightest ornaments of science, and whose modest worth, solid as the foundations of rock which he has loved to explore, is known and appreciated by every body except himself.

It has now fallen into the hands of one who comes at your call, with sensibilities bleeding, even amidst the pleasures of the day, from the rupture of those cords of friendship which sometimes bind the soul of a pastor to a generous people, with the strongest bonds of earth. He comes to accept responsibilities which the shoulders of a Hercules are neither strong enough nor broad enough to bear. He comes with few conscious qualifications, beyond an earnest purpose to devote whatever powers he may possess or acquire to the promotion of the true glory of this Institution.

If I can have not only the sympathy and coöperation, but the prayers—more powerful than a host—of the christian friends of the college, possibly, through what Milton calls "the might of weakness," I may not wholly disappoint your expectations.

Not an alumnus of the institution to which your liberality has invited me, but coming as I do from a college of somewhat different prestige and affinities, I deeply feel that I shall need friendly constructions of my acts and efforts. While I can never renounce nor denounce my dear old mother, the foster-child of such men as Shepherd and Winthrop and John Harvard, the school in which my father and my ancestors were educated, and the Alma Mater of many of the literary magnates of the land, I can receive Amherst College to the

welcome of a warm and appreciating heart and ask to be accepted as a true son, though by adoption.

Few persons can have a higher appreciation of the importance of this College, than myself. Its history, the religious designs of its founders, the faith as well as generosity of its patrons, the ministry it has reared, the prayers of the churches which sustain it, the reasonable prospects of its rising greatness and utility, entitle it to the highest consideration. Its capabilities are not yet fully developed, nor is its present strength generally known. I look upon it as a young *lion*, born at the foot of Holyoke and Tom, couching here in sheltered seclusion, in the centre of the Commonwealth, acquiring muscle and brawn and power, and destined to make its voice heard throughout the land.

The custom of these occasions requires that I address you on some subject connected with the ends for which our collegiate institutions are founded. What are those ends? or rather what should they be? In other words, what is the proper nature and design of education? and how is this design to be promoted by the discipline of a College?

To educate is literally to conduct forth, or more generally to develop and train. In an acorn is an embryo tree, with a multitude of tiny roots, branches and leaves. Under appropriate circumstances, it will germinate, expand, grow and become an oak. The work of preserving, cultivating, pruning, training, and securing the most perfect product, is the educating of it. A thousand nuts fell from the same limb. Many of them perished and many more produced only unsightly shrubs. The difference among them, is, to a great extent, the result of the different influences to which they have been subjected. Apply the illustration. Education, in respect to the human species, is that watching over, cultivating, training, educating and forming the growing man which makes his maturity soundest, best proportioned and best fitted for usefulness, instead of something inferior, pernicious, or good for nothing.

The *end*, or *aim* of education is indicated in the last sentence. It is to produce in the person educated, *the highest style of man*. Or, if this be impossible, then the nearest approach thereto, of which the individual is, or can be made, capable. It is not primarily to produce greatness in partial directions, great mathematicians, great philologists, great philosophers, but, in the best sense of the term, great *men*—men symmetrically and powerfully developed—coming up to the highest perfection of their being, and capable of achieving whatever is possible to human nature, in any department of effort to which they may apply themselves.

Education, therefore, may be contemplated in the first place physically. It involves the developing and energizing, at least, the protecting of the physical system.

We cannot expect that all men will be like the first pair in paradise,

—of noble shape, erect and tall,
Godlike erect, with native honor clad.

But we can expect a much higher measure of physical perfection than is ordinarily attained. Much depends upon it. Duty demands attention to it.

Bodily disarrangement is not only an occasion of suffering, but often of moral perversity and intellectual inferiority. It clouds and clogs the understanding, sometimes dethrones the reason. When the mind is not wrecked, it is enfeebled by it. Great undertakings are prevented, and ordinary affairs inadequately performed. Bodily disorder perverts the judgment. We cannot justly weigh and balance considerations under the influence of it, and form safe conclusions. It is a prolific source of moral evil. It induces restlessness, stimulates bad passions and prompts to vicious indulgences. A morbid appetite for intoxicating drinks, and for hurtful narcotics is often occasioned by it. From the same source, springs much envy, spleen and misanthropy. He who intelligently offers the

prayer "lead us not into temptation" will pay attention to his bodily condition; for it requires less effort to be a good man with a sound body, than with a system imperfectly organized or disordered.

Good taste teaches the same doctrine. We admire most that which approaches nearest its own perfection. This is true in horticulture, in agriculture, in ornithology, and in the treatment of domestic animals. But many a man who would spend hours every day in tending and grooming a favorite racer will abandon his children, except in actual sickness, to almost total neglect.

Anciently it was not so. The palæstra, the gymnasium, the chase, the exercises of the camp, though intended for the increase of military efficiency, promoted physical strength. The ancient ideals of perfect commonwealths have given prominence to the subject of corporeal vigor, in their systems of education. In the middle ages too, hunting, war, the spirit of chivalry, secured both among the nobility and the masses, a superior physical development. But in our country there is reason to fear, that, in this respect, we are deteriorating. Partial deformity, the languid step, stooping shoulders, cadaverous countenances, are too common. Among students, has not death held his terrible revels in our day, to an extent never before realized? Our halls of justice, and still more our pulpits are thronged with invalids.

Physical education is not the leading business of College life, though were I able, like Alfred or Charlemagne, to plan an educational system anew, I would seriously consider the expediency of introducing regular drills in gymnastic and calisthenic exercises. If agricultural and mechanical operations, and even martial movements could be added without injury to scholarship, so much the better. At all events, I would take measures for imparting hardihood, and the proper use of the muscular energies. But without innovation, something can be done in this direction. The general laws of health can be imparted and some of them insisted on. It can be shown to

the scholar that it is not often intellectual exertion, even though intense, that digs the premature graves of students. It is neglect. It is imprudences. It is irregularities. It is sinful indulgences. It is violence, perhaps in many cases innocently committed, against the laws of the constitution. Though a morbid contemplation of symptoms should be avoided, and something of the "rough and tumble" of life welcomed, at the same time, there must be a proper and timely allowance of sleep, abstinence from alcoholic and narcotic excesses, moderation in food, temperance in all things, and that peace of mind which a consciousness of duty well performed and faith in God imparts.

Perhaps I am dwelling too long on this topic. But of one thing I am certain; the highest intellectual efficiency can never be reached, the noblest characters will never be formed, till a greater soundness of physical constitution is attained.

We come to the more immediate business of College life, when we say that *intellectual* culture is essential to the highest style of mind.

In comparison with the great absolute reason, we sink into insignificance, but regarding the mere animal in contrast with the rational, the human mind is above estimate. But valuable as mind is, when untutored, dormant, it seems of an almost infinitely inferior order to that of a cultivated mind. Think of the miserable Bushman scarce one degree, in appearance, above the orang-outang, and then think of Aristotle, of Plato, of Euclid, of Paul, of Leibnitz, of Jonathan Edwards, of Washington,—and the educated mind seems god-like. See too what it has accomplished! Stimulated by motive and concentrated by discipline; it has sounded far into its own depths; it has acquired dominion over the most terrible brute strength; it has subdued powerful agencies of nature to its use; it has wandered among eternities and conversed with God. It should be remembered also that there is no assignable limit to its improvement. It cannot indeed ap-

proximate the intelligence of the Infinite of Infinities, but has it not capabilities for progress through unending ages?

It cannot be expected that ordinary minds should reach the stature, in this world, of our intellectual giants. But many of the renowned were scarcely more than ordinary, in native genius. Circumstances, cultivation combined with determination, have made just the difference, in their case, between greatness and mediocrity. What would even the elegant Roscoe or the accomplished Addison have been without the influence of letters upon them? And in families, is not the son who has received a liberal education and profited by it, a marked man among them? The sheaf of Joseph around which all the sheaves of the household stand and make obeisance? Thousands and thousands who have lived in sequestered places, undistinguished and of no great use to mankind, might have become the benefactors of their race, if they had been fitted for it, by the discipline of our higher schools. Gray's beautiful Elegy will apply to a hundred churchyards as well as to that in which it was written:

"Perhaps in this neglected spot is laid
Some heart once pregnant with celestial fire;
Hands that the rod of Empire might have sway'd,
Or wak'd to ecstasy the living lyre.

"But knowledge to their eyes her ample page,
Rich with the spoils of time, did ne'er unroll;
Chill penury repress'd their noble rage,
And froze the genial current of the soul."

It is doubtful even whether that exquisite production would have been composed or its author ever been heard of, had it not been for the schools of Eton and Cambridge.

I say again, it is not expected that all minds could under any circumstances attain to a gigantic growth. Spencers and Goethes would never have become such, without original inspiration. The discovery of recondite physical laws is a gift chiefly confined to such intellects as Euclid's and Kepler's.

In natural history, Humboldts and Agassizs are not graduated in every college class. But a mind of sound, though moderate powers, can be elevated to great comprehensiveness and force, by proper discipline ; while the master-spirits I have just mentioned could never have become master-spirits without it. Almost any young man who has made attainments sufficient to enter on the higher courses of education can distinguish himself in them. Study will not create mind, but resolution, perseverance, guided by a wise system of instruction will so unfold and strengthen the faculties, that it will appear in time as if a miracle had been wrought upon them.

But what is that kind of discipline which will best secure the result in question? A satisfactory answer may require a little more discrimination as to the precise intellectual ends to be sought by study. These are not mere knowledge. To know a multitude of things, to have what Coleridge calls "many knowledges"—this is something different from being educated. You have heard of learned dunces. If one head could contain a whole Alexandrian library, a little spice of common sense would be worth more than all this learning without it. Knowledge is chiefly valuable as furnishing materials for thought. There must be a power of reducing knowledge to general principles, or at least of arranging it in categories. Otherwise the full-stuffed head will be hardly better than a great lumber garret of confused facts and notions. The mind must "learn to learn." It must get a power of self-control, of self-stimulation, of concentration. It needs, in its voyages, helm and canvass and pilot and breeze. It must have the mastery of thought instead of being mastered by it—not driving headlong when excited, but going whithersoever the governor listeth. As all subjects have relations, checks and balances which should always be considered in making up conclusions, it must be comprehensive, capable of looking all round a question, foreseeing consequences and weighing circumstances. It should be well proportioned, not narrow, or one sided, titanic in some respects, lilliputian in

others, but broad, compact, symmetrical, strong, able to discover and appreciate all that belongs to a subject or question. Now for such a purpose, knowledge is chiefly important as connected with training. Colleges should be intellectual gymnasias, rather than intellectual warehouses.

And here I come more directly to the question, what is that kind of discipline which best secures the proposed result?

As a first principle, the system of intellectual training should be formed by minds which are approaching the maturity of their stature, and not by those which are in the boyhood of their being. In other words, the course of study should be determined by experienced instructors and guardians of learning, and not by mere students. The converse of this proposition is an absurdity. It involves a *ὑστερον προτερον*, the solecism of agency before existence. I do not say that an election as to certain studies should never be allowed. Individual taste and preference, in some things, may be safely consulted, though never wholly irrespective of the wisdom of experience, and rarely then, in the grand staples of discipline, but chiefly in its lighter furnishings. Where a choice of studies is permitted, except under careful limitations, the breadth and balance, and for the most part, the intensity of scholarship, is destroyed. A neophyte, in matters of education, might suppose that the mind, in order to its highest development, should follow the bent of its own tendencies. But, practically, this is only saying that each scholar should study those branches which come easiest to him, which is nothing more than to say we should cultivate those faculties most which need it least. A finished intellect can never be constructed on such principles. It may become great in specific directions, as if the main growth of the body should go into one arm, or a tree should expend its sap on a single side-branch. But deformity not beauty, a monster not a *man* is the result. At best, under such a system or want of system, the scholar becomes a self-made man rather than the subject of a liberal education. I do not object to self-made men, when they are capable of

making themselves well. I confess that some have risen to eminence without a Diploma, in the words of another, have even beat the College on some of its own fields? I honor them; they are nature's nobility. But such men have usually had an inborn greatness to begin with. They have moreover had the wisdom to avail themselves of some of those very helps by which the discipline of our schools is secured. At the same time, no persons more deeply feel and deplore the infelicity and insufficiency of their early education than many of these very individuals. But, whatever may be said of a Bowditch, a Hugh Miller, or of one, *venerabile nomen*, whom to mention is to honor—when you come to ordinary self-made men—I refer chiefly to those who aspire to the higher walks of learning, for in the common business of life common sense often saves them—there is usually in them some disproportion or unsoundness which might lead one to suppose that not nature but nature's journeyman had made them. A truly liberal education, on the contrary, produces minds of force and completeness. It produces, not, in the first instance, accountants, actuaries, lawyers, pharmacologists, theologists, but *men* capable of becoming either or all of these, or of standing up in the full stature of men, without a specific profession. This sort of discipline is secured by studies judiciously selected, wisely and perseveringly taught and thoroughly acquired, studies not capriciously chosen by the student but established by the institution.

Among these studies, the mathematics should hold a prominent place. This science is often disparaged. Dulness condemns it as wanting in genius, and laziness as devoid of utility. Some distinguished men have spoken opprobriously of it, as a means of intellectual improvement. Sir William Hamilton—by whatever motive he may have been actuated—has recently brought the battering ram of his strong aversion to bear against it. In his collection of discussions, published originally in the Edinburgh Review, the Essay entitled “thoughts on the study of mathematics as a part of a liberal education,”

has made, to some extent, its intended impression. The mathematics are just now at a discount. But whoever reads Sir William's article with care, will find matter in it to destroy its force. Though it beats, all the way through, like a storm of hail against the science, as adapted to mental training, his object is simply to lower the inordinate prominence given to this branch in one of the English Universities. His objections to it are levelled against its excess—to the comparative exclusion of other studies. They would be objections to excess in metaphysics or philology and have no bearing therefore against our proposition. Then the authorities which he quotes are either authorities against this same excess, or they are such men as Buddaeus, Paschal, Burke, Warburton, who though great mathematicians themselves, yet found it necessary, in their support of moral and religious truth, to put down the presumption of those mathematical sceptics who could see no conclusiveness in anything but a demonstration. Then again Sir William's argument bears chiefly against the formularian mathematics, which make but a small part of our training, in this science. And, finally, he admits himself what we chiefly insist on, viz: that properly studied, they "may be beneficial in the correction of a certain vice and in the formation of its corresponding virtue. The vice is the habit of mental *distraction*; the virtue the habit of *continuous attention*." So much is conceded. But this one thing is *the* thing which above all others the lawless, refractory intellect of boyhood requires. It needs the faculty which it does not possess by nature, of holding subjects in a strong and steady grasp, till, with all that belongs to them, they have been fully examined. This faculty, generally called attention, is of the first moment to us, in all our intellectual processes. Was it not Newton who said that if he excelled some other men, it was chiefly in the power of fixing his attention? It is as certain that this power is improved by the mathematics, as it is that the Principia could not have been written without it.

But besides this, the study of the mathematics promotes

penetration. It gives the mind a piercing, protruding force, intensive in a forward direction. It accustoms the pupil to carefulness, to the habit of excluding whatever is irrelevant to a subject, to accuracy and compactness in his reasonings, and the seeking of clear and irrefutable conclusions. And if some great metaphysicians have spoken disparagingly of the science, it is at least true that many of the greatest metaphysicians, for example, Descartes, Malebranche, Leibnitz and Bacon, have reached their eminence in philosophy, only after first becoming great mathematicians. Thus far I have spoken of the mathematics as an intellectual discipline, only in the early stages of its study. But that limitation in the number of faculties benefitted, of which Mr. Hamilton complains, has no relevancy as an objection in the case of advanced scholars. God created the universe on geometrical principles. His infinite thoughts are written in lines and angles and spheres all over his material works. His great ideas are embodied in created objects. He invites us to read those thoughts, comprehend those embodiments and study the laws of infinities. When the scholar has reached these higher regions of attainment, which he may do before leaving college, and has come to perceive the relations of his propositions to the physical sciences, to be able to discover and elucidate the intellectual truths which underlie his theorems, he begins to exercise the highest forms of logic in his reasonings, and to realize in his emotional nature, the rewards of previous study over formulas and elementary principles. The mathematics have come to have a meaning, and an object. After long and wearisome toil up the hill, the lower mountain summits have been reached, and new and highly excited prospects have been opened. He has emerged into a world of poetry, and hears the music of the spheres chiming around him.

On the whole, I must apply to the question of the importance of this study, the line which Mr. Hamilton has taken as the motto of his able discussions, "Truth like a torch, the more 'tis shook, it shines."

I shall speak with more brevity of classical studies, in a system of intellectual training, not because I esteem them less, but because they happen now to be in the ascendant. We need them as a counterbalance to the mathematics. The tendency to formularian Cambridge should be ameliorated by classical Oxford. The study of language disciplines the judgment, teaches analysis, comparison, selection. The study of the Greek and Latin classics opens golden treasures of literature. It spreads before the scholar, the best models of taste. It corrects the tendency to fustian and rodomontade, in composition. It cultivates sobriety, pertinence, precision and condensation of speech. It inspires one with charming sentiments, and kindles a controlled but fervid eloquence. It gives great command of words. It fills the mind with interesting allusions, ennobles the imagination, and ministers in many ways to the art of persuasion. Then, classical reminiscences become a source of happiness, through ones whole life. I look back to those rich old masters as to gardens of spices, and when I turn aside to walk among their shades, my mind is invigorated and my spirits are refreshed.

The Greek language, though brought to perfection more than two thousand years ago, is probably the best instrument of thought ever possessed by man. The Greeks were a wonderful people. They seem to have been raised up as the representatives of *the beautiful*, and to be the world's instructors in art and letters, for all ages. Their language is the embodiment of æsthetics. Rich in combinations, copious, artistic, euphonic; of singular transparency, flexibility—wonderful for chastity of ornament and symmetry, the very parthenon in words, it is equally adapted to the sublime strophes of those "proud and high-crested bards" Pindar and Simonides, and to the simple narratives of Herodotus and the author of the *Cyropædia*.

If the Latin is in some respects less perfect, it is still a wonderful tongue. Inferior in originality and pliability to the Greek, it has more rotundity, more stateliness, and perhaps a

more labored syntactical structure, besides the advantage of being one of the great foundation elements of the English language, and several of the continental tongues, and a key to some of the most valuable modern treatises that exist.

In a course of liberal study, we want, also, the leading philosophies. The intellect should acquire acumen, and the power of holding many associated relations in the mind, at the same time, by the habit of considering metaphysical subtleties and distinctions, and should learn the art of binding together premise and conclusion by the iron links of logic. Ethical studies should receive attention that the principles of morality may be understood, the moral instincts developed, and sound moral judgments be rendered. The observing faculties should be improved, and in natural history, chemistry, mineralogy,—and most of all, geology, the science of reading the history of creation, which God has written in the foundations of the earth, the mind should learn to seek out and comprehend the mysteries of chaos and something of the force which educed beauty from confusion. Theology, too, natural and revealed, has wonderful power in securing mental development. The fine arts are adapted to impart a correct taste and a certain nobleness to the soul. Some knowledge of the great modern languages and literatures of Europe open inexhaustable stores of thoughts and modes of expression among which a person may acquire intellectual wealth without limit, in after life. Nor should the art of speaking and writing be neglected. Expression, indeed, is an every day affair; but with the scholar it is the one power by which he achieves his victories over minds, and by which he is expected to benefit the world.

Some time may be devoted to general reading. But he who •thinks light literature a tolerable substitute for hard study, deceives himself. He cannot attain by it a power of clear, consecutive thinking and reasoning, and will find himself distanced in the race of life by the plodding student at whom he sneers. Superficiality will be the characteristic of his learning. If he becomes able to throw off, occasionally, the scintillations of

genius, he will never be qualified for solid investigations. He may be a brilliant boy, but he will not be a powerful man.

As collateral aids to a college course, well regulated literary societies stand high in my estimation. Genius is stimulated by them, knowledge put to use as in real life, and in the wrestling match of debate, the intellectual muscles are strengthened and made flexible. In this respect, Amherst College seems to me well appointed. It was my fortune to be present some weeks ago, when the Athenian and Alexandrian orators contended so eloquently before the freshmen in behalf of their respective associations.

Multa viri nequiequam inter se vulnere jactant;
Multa cavo lateri ingeminant; et pectore vastos
Dant sonitus: erratque aures et tempora circum
Crebra manus; duro crepitant sub vulnere malae.

The scene was imposing; and, withal, so student-like that it made the old College blood of 1827, tingle in my veins. Let these young, twin giants wrestle till the utmost force of each is developed. Let the blue badges and the white fight on, till both sides are covered with the glory of their achievements, and while decency rules and fair play is the watchword,

Nemo ex hoc numero mihi non donatus abibit.

On the *moral and social part of education*, I shall restrict myself, for your patience's sake, to narrower limits. Man is created with a sense of duty. Or if not so created, as soon as there is opportunity for awakening his moral faculties, he begins to feel obligation. This feeling is a necessity of his being. It distinguishes him, even more than intellect, from the brutes. There is in them apparently some faint shadowings of the understanding. So we speak of the cunning fox and the half-reasoning elephant. Linnæus, if I remember correctly, thought he discovered in certain birds the faculty of abstraction, and our own Audubon has furnished materials

for a similar conclusion. But whatever might be said of a possible embryonic intellect in the beaver or the bee, no naturalist has ever detected, in the inferior orders, indications of Conscience. We govern the brute world by fear, but never by moral considerations. Man's characteristic distinction from it, is the existence of an august moral judge in the supreme court of his nature.

As mind is better than matter, so conscience is superior to both. With an ordinary intellect, high moral qualities always ensure an elevated character, but no measure of the former can impart true nobility to a person, without the latter. Have we not Robespierres and Machiavellis, Catilines and Cæsar Borgias, Rousseaus and Byrons enough to illustrate this fact? The most you could say of a person possessed of great intellect, in connection with moral depravity, would be that like Henry St. John Bolingbroke he is "a splendid sinner," or like Milton's Satan, "little less than archangel ruined." The truth is, a learned sinner is a monster, and a highly cultivated intellect, without a controlling conscience, is a *curse*. It is a curse to itself and to society—to society as it makes demagogues and traitors, to itself as the more abundant the fuel, the more terrible the fire. Compared with such characters, the Shepherd of Salisbury Plains and the Dairyman's Daughter were angels.

Intellectual culture without moral elevation has been tested in communities. We have admired the lettered elegance of Greece. But with all her beauty there was consumption in her breast. "The Athenians," says Mr. Legare, "were a people steeped in profligacy to the very lips, and wholly without shame or sensibility on subjects of honor." If the remark is too sweeping, it has too much truth. You know the consequences. They became incapable of retaining their freedom, because they had first made themselves unworthy of it. Vice is the bane of every people among whom it exists. Educated vice is more to be feared than ignorance. A community

of ignorant wretches might be controlled by force, but a community of intelligent rascals is hardly better than a community of fiends.

The Commonwealth understood this when it enacted that "it should be the duty of all instructors of youth, to exert their best endeavors to impress on the minds of children and youth, committed to their care and instruction, the principles of piety, justice and a regard to truth, love to their country, humanity and universal benevolence, sobriety, industry and frugality, chastity, moderation and temperance, and those other virtues which are the ornaments of human society and the basis upon which a republican constitution is founded."

When the highest style of manhood is sought, in a system of education, the virtues must be inculcated. There must be on the part of the pupils, a never ceasing inspiration of honorable sentiments. Reverence for the aged, veneration for parents, for sacred institutions, for wisdom and goodness in character, a regard for every thing ennobling, and an abhorrence of mean actions should be sedulously taught. Generosity towards competitors, a chivalrous sense of honor, though without its discounts, and an almost proud sincerity and openness of utterance, though chastened by kindness and discretion, must be held forth to admiration. We should seek to realize the morally sublime, in character; moral courage, moral strength, especially the union of powerful emotion with firm self-control—as when Priam on his knees begged of Achilles the corpse of his murdered son,

One universal solemn shower began,
They bore as heroes, but they felt as men.

The scholar must be habituated to right thinking and right acting—the *το καλον* and the *το περιπον* must be kept constantly before his imagination.

Moral education is to be secured among students, partly by instruction in the text books of moral science, partly by living examples in the character of their intellectual guides, some-

what by general exhortations, and exhibitions of moral truth,, and most of all by a wise, firm discipline, always just, always paternal, but always immovable, when right. Morality must be learned as we learn Algebra by working out its problems. Its subjects must be moulded as pottery, trained as vines, gently broken in to the work of life as young coursers unaccustomed to the way. Or to take higher views, they must be taught *self-government* that they may emerge from subjection by looking in to the perfect law of liberty which consists in bringing the *will* into perfect concordance with the moral sentiments. In doing this, however, it may be well to keep in mind a saying of Dr. Arnold, that "the state of boyhood is a state of imperfection"—nor is it safe to presume that the state of young manhood is always much better.

To the moral belongs the social, and to the social the civil relations. I have not time to dwell upon them. But man was not born for isolation. While he is an individual, he is also a humanity. As thousands of waves swell and heave in the sea, but are all bound together in the unity of a single ocean, as tens of thousands of dew-drops gem the grass, but we admire their brilliance chiefly as they sparkle in associated beauty, as the stars have each an individual splendor, but their highest glory is only seen when gazed upon as one vast, concordant, glittering firmament, so man consists of myriads in unity—God the centre, and we all bound inseparably to Him and to each other. We cannot attain the proper stature of our being as solitary existences. We have a mission to mankind. Our right state is love, and our true relation, a relation of beneficence. Colleges then should not be monasteries but societies. The social nature should be cultivated. In the commonwealth of letters, as in the great world, for which we are here preparing, no one, whether instructor or scholar, should live to himself, but each to each, and all to all.

I have left myself but little time to speak of a subject which infinitely transcends all others. I refer to *religious education*.

The highest style of man cannot be produced without religion. In unrenewed minds, there is a total deficiency of that element which constitutes the crowning glory of man, his inward spiritual life. It is the result of a spiritual birth, and its consequence is a new spiritual existence. It is as much superior to mere reason as reason is to mere animal life. It is supernatural and makes the subjects of it sons of God. It was lost by the apostacy and can be restored only through Christ. Let it first be secured in him, and then developed into all the beautiful proportions of his fulness. Without it the scriptures speak truly of man when they say he is dead. The highest attribute of humanity, that which links him to the divine, is extinct within him.

Nor with this negation in his nature, can he rise to the highest order of greatness. No Atheist can be a great man. He rejects the greatest and most stimulating idea in the universe, the idea of God. His thoughts are narrow, every thing is limited, the world is a monstrous insignificance—even duration and space, if they still exist in his mind as infinities, exist without a meaning. What is philosophy without God, but a wretched jumble of dogmas and speculations without a centralizing idea? What is history, but a mass of cruelties and absurdities—a muddy current which began from no fountain and flows to no sea? And poetry? I say nothing of Isaiah and David. The old Homeric majesty could never have been reached without the supernatural.

But we need the *christian* religion for the best growth of the intellectual powers. We need the stirring, expanding influences of its great thoughts. Take away the grandeur it imparts to Milton and Dante and Klopstock—take away the sublimity it gives to the creations of Angelo and Allston, and the productions of these masters become insignificant. Nor could the statesmanship of Washington have been reached without it.

And here let it not be thought that a bare admission of re-

ligious facts is sufficient to the highest education. There must be an intense realization of them. The human mind must come into connection with the divine—the finite must feel the stimulus of the infinite upon it. It must grow in harmony with the unchangeable laws of God. If they are against it, they will dwarf it. Even morally, the attainments will be of a low order. The virtues which actually exist, all springing from, and abiding in, nature, instead of being rooted in the divine, must be of an inferior character and of uncertain continuance. Even the physical powers will suffer without religion. They need it for energizing and harmonizing them, and for maintaining the self-denial essential to their full development.

This branch of our subject has much to do with education in a christian College. We are to aim at producing the highest possible order of men. They must, therefore, be men mighty in God, actuated by the purest religious motives, laboriously beneficent men, self-denying men, having something of that grandeur of spirit which was so overpowering in the old prophets, united with that irresistible might of lowliness which shone in the apostle John. It is to be our aim that they should go forth anointed with the Holy Ghost, as it were under a new dispensation of devotedness to Christ, that by them his universal reign may be hastened on.

I cannot be mistaken when I assert that this College was founded primarily for Christ. While it undertakes to furnish the highest culture for all who resort to it, irrespective of denominations and beliefs, its main object was to assist in training up a learned and pious ministry. I have the best authority for saying that had it not been for this object, Amherst College never would have existed. It is in perfect accordance with the designs of its founders, that so large a number of young men, now doing a great work in the world, first realized here those experiences, through which we come to the consciousness of a new spiritual life. It was, and should

be, a school of Christ. How constantly then should its patrons and guardians, its entire corps of teachers, its large and constantly increasing band of Alumni and christian students, bear it on their hearts before God, in perpetual prayer—and how earnestly should all the churches of the Redeemer plead for the abiding and powerfully saving presence of the Holy Spirit, in this school of the prophets. Let there be prayer, importunate, intense, believing, never-ceasing, prevailing. Prayer, prayer is the very seed-corn of our enterprise.

Is there not a tendency, in great literary institutions, to religious degeneracy? Where vulgar infidelity is abhorred, does not a subtle scepticism often creep in? Is not this evil, unless guarded against, almost unavoidable? The cultivation of literature and science is the daily employment. Intellectual life is stimulated to the highest degree. Principles are questioned; reasoning takes the place of faith. Competitions, youthful passions, the occupation of the thoughts on questions purely scientific, the mind constantly steeped in the elegant idolatries of classic heathenism, which though elegant and classic are idolatrous and heathenish after all,—how naturally do these things alienate the heart from God. It is a question which has often inspired me with anxious thought, whether our great schools of christian learning were not gradually losing their spiritual tone? I have even asked myself, whether in the youngest as well as in the oldest college of the state, the intellectual was not overgrowing and overlaying the religious? whether there were not tendencies even here to that dead sea of naturalism which has wrought out such fatal results in many of the universities of the old world? Should this prove true and deterioration continue, you will have a nursery of pantheism among you instead of sanctified scholarship, and “the children of Zion will faint for hunger in the top of every steet.”

I know how deeply my predecessors have felt on this subject, and how earnestly they have labored to make this insti-

tution, founded in faith, a blessing to the churches. I sympathize with them to the bottom of my heart. I never would have broken in on those sacred friendships which I had formed around the altars of God, and which had been strengthening for almost a quarter of a century, merely to promote the intellectual growth of any school in the world. I love the classics. The measures of the Mantuan poet are often chiming in my heart, and the lyre of Scio's blind old bard stirs me like a trumpet, but there is something to be thought of as much higher than Grecian and Roman learning or mere science, as the stars are above their reflected images in the deep. Cicero and Demosthenes demand my admiration. But there is one whose shoes latchet Demosthenes and Cicero are unworthy to stoop down and unloose. The eloquence of the Bema and the rostrum are to me as Alpine snows compared with the words of Him who spake as never man spake. I would not, indeed, cultivate human learning less but divine wisdom more. "For this is life eternal that they may know thee the only true God and Jesus Christ whom thou hast sent."

The future religious condition of this College is a subject on which I am burdened with a sense of responsibility. As a christian parent would esteem it the last of misfortunes to be the occasion of giving existence to a person who should devote himself to a life of hostility to Christ, however elegant and classical and hidden the form of hostility might be, so if I were to aid, however unintentionally, in forming of the sons of Amherst, in my day or in any coming generation, an enginery against the church, I should not only consider my life here a failure, but would curse the day of my inauguration to the end of time. Yes! verily, I should esteem it a calamity more dreadful than death, if through any fault of mine this College should receive a poise, even to the breadth of a hair, towards the transcendental atheism of the age. I would not be the means of assisting to qualify minds, by high courses of learning, to exercise a more efficient, though perhaps more

covert agency, in undermining the faith of the community, no not for all the honors man ever heaped on a mortal. Pardon me then if I say earnestly to the alumni and all the friends of the College, Brethren pray for us.

The patrons and friends of the College will perceive that the great idea which I have of education, and which I have urged in this address, is the formation of *men*, men capable of high scholarship, of professional eminence, and honorable achievement, but first of all, men. It is to be hoped, indeed, that your triennial will be thickly strown with names of solid and of brilliant scholarship, in science, in letters, in theology, in statesmanship, in arts, but would to God that from the top to the bottom of its ever-lengthening columns, no name might ever be found but the name of a completed man.

This idea of education presents it as a matter of universal interest, and justifies an appeal for the public patronage. I speak here both as a patriot and a christian. As one who loves the old puritan commonwealth of my nativity and thinks its relative position among the States of no small consequence to the country, I plead for those institutions whose object is to bring upon the theatre of action the largest possible number of wise and good and great men. I say to our merchants, I say to the politicians, I say to the mechanics and farmers, if you would hold your birthright in the fraternity of stars and stripes, you must produce *men*. You have no boundless prairies, nor mammoth rivers, nor great staples of trade. You make but a sorry figure on the physical map of your country. And yet you have, or have had weight, and you have had weight because you have had men, and you have had men because of your colleges and schools and churches. Your men, not your miles, have made you great. Before the revolution your men were the large and tall trees of the land. In and since the revolution, you have always had distinguished men in the high places of influence,—and all this while, at the seat of govern-

ment and throughout the nation, they have kept your star equal in brilliance to the largest of the thirty, and a single name has sometimes been thought glory enough for a continent. You will need men not only to guide the politics of the country, but for your pulpits and professional chairs and great sources of religious influence—men who will make themselves respected, and have the power as well as the disposition to lift up the community around them. We want men, educated men, completed men, at the head of our mechanical and agricultural interests and at the resorts of commercial exchange. The welfare of this age and of generations yet unborn, depend on your having them. It is the proper mission of Massachusetts and of New England to be the great man-growing section of the country.

Young gentlemen, the undergraduates of Amherst College, I have been allured to these your Academic shades in the hope of bestowing some benefit on mankind by aiding you, through a course of education, in becoming *men*. I would assist to make you rich in resources of happiness, useful to your generation, and possessors of the highest order of manhood and influence. In my relations towards you, austerity and rigor will have no lodgement among the dispositions of my heart. I shall wish to annoy you as little as possible by the restrictions of government. But the regulation of the affairs of our society, by a firm execution of its laws, and at whatever hazard, is of as much importance to your happiness and progress as to the order and reputation of the College. I am aware that the life of an undergraduate is not a life of the largest liberty. But we have a right to expect that you will consider what is due to the proprieties of the place, what is becoming in young men who respect themselves, and how deeply the hopes and affections of others are involved in your success. Be assured for your encouragement, that whatever a scholar really determines to do, he will generally find him-

self able to accomplish. Genius without effort never yet secured greatness, but enthusiasm in your studies will make *them* pleasant, and *you* strong and brilliant in them. Your course here, if properly regarded, will not only fit you for professional usefulness, but bring you into that fellowship of letters which every truly educated man delights in.

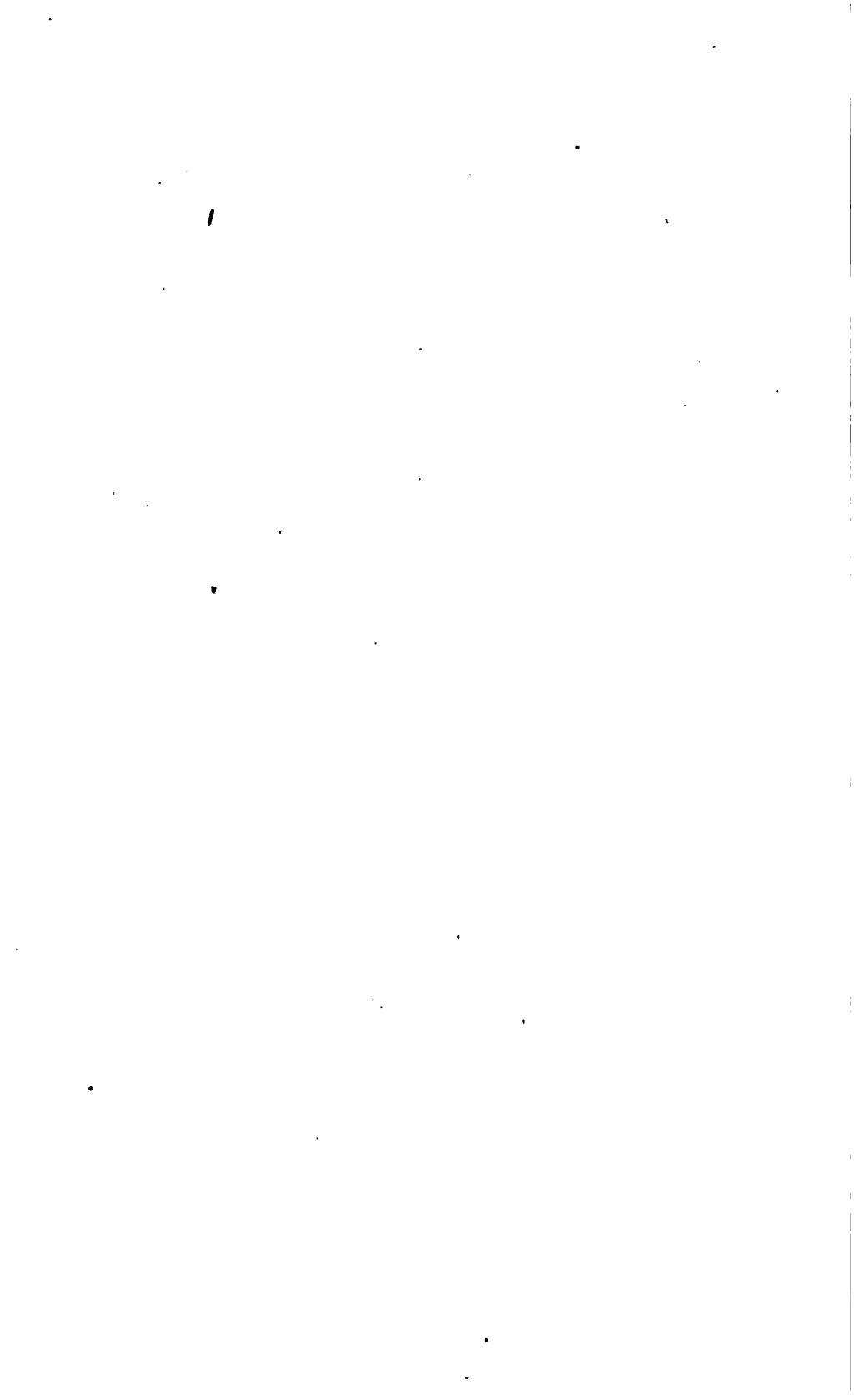
Think it no want of confidence in you, when I say that you will need to be on your guard. Young men have generally much of nature's nobility in them. Their aspirations are high, and honorable conduct has charms for them. But they are proverbially impulsive and often too inconsiderate of consequences. Pardon me for reminding you then, that you can accomplish but little any where, but especially in this country, without character. But character, though achieved with difficulty, is often lost without effort. Character in a young man is a fortune to him. But like a lighted lamp of richly-wrought pottery, though so brilliant and so useful, how easily broken; and when broken how difficult to repair—

Facilis descensus Averni, sed revocare gradum, hoc opus, hic labor est.

Most of you aim to be useful in the world, chiefly by expression. But remember, young gentlemen, that expression is not confined to words. The man himself is an expression. The face, the flashing eye, attitudes, motions are expressions. Manners are expressions. Actions are expressions. Presence is an expression. The greatness and excellence you attribute to a person and suppose him to possess act as expressions. The spirit of God glowing within him is a powerful expression. His whole frame and being are an embodiment and manifestation of ideas. He, then, who would be great in expression must first be great in himself.

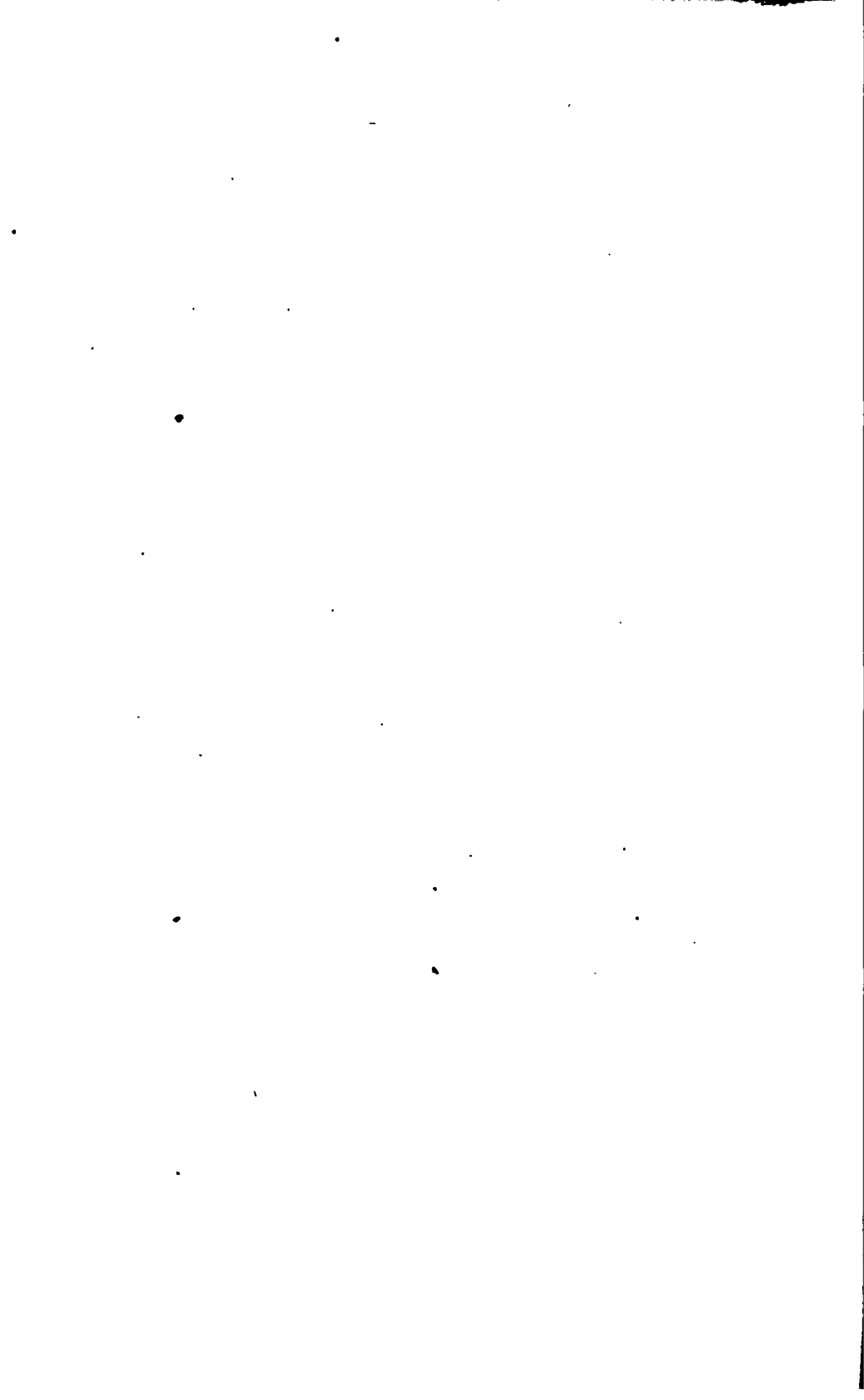
Young Gentlemen, your highest attainment is the attainment of right relations towards God, and a concordance with the other harmonies of the universe. There is one great *Central Life* whose pulsations are beating through all created worlds.

When in addition to a profound and brilliant scholarship, attended with high moral and social excellence, and wise physical self-control, you come into sympathy with this great *Life*, so that your spirit answers to that spirit, as the pulsations of the wrist keep time with those that are throbbing in your heart, then will you be truly educated, then will you have reached the highest order of man.









RECEIVED
FEB 27 1897

THE
Anthropometric Manual
OF
AMHERST COLLEGE.
1893.

times during the four years course, and the record kept in the fire proof safes of the Department to which the individual examined may have reasonable access so far as his own record is concerned. And should he desire a more frequent examination the Department will readily grant it to him.

This table and method however do not offer to the young man an ideal or typical standard which he may try to reach as if he were passing a competitive examination. It often shows him that he probably has not the powers and endowments which it is possible for him to have. He can see the condition of his fellows and with proper, well trained, and well directed cultivation of his capacities, may rise to higher attainments and possibilities of achievements in his physical, mental and spiritual life and yet not with the zeal and furor, and possible dangers of a contest, or a prize stimulus. He may neither neglect one part of it, nor give undue attention to either of the other parts of his nature without endangering the whole. While he is not a machine yet he is an organic unity which is not directed by physical force but by a soul which has all power over both mind and matter. And the Theory and Practice of Anthropometry gives to the spiritual element of the individual a greater insight into the possibilities of the man, and helps him to make much more of his individual, immortal, manhood.

The Anthropometric Card of Amherst College.

The study of the physical condition of the students of Amherst College by means of the measurement of their bodies is carried on as a part of the work of the Department of Physical Education and Hygiene. Every man, save an occasionally imperfect one, is carefully examined and his record preserved in the books of the Anthropometric Laboratory, until reliable results can be now secured from the large number of physical data at hand.

The main result sought for in this study, is to learn what is the physical form, size and strength which each young man may expect to have, and how these conditions may be adjusted or perfected, so as to give him the greatest efficiency in life, now, and farther on. In the absence of a record of the physical perfection of Adam or Eve, there seems to be no other way to obtain our pattern-model or standard than to examine and compare accurately and minutely a sufficiently large number of living men, so as to form an idea of what are the present conditions of them, and then study how to make

AMHERST COLLEGE.

AN

Anthropometric Manual

GIVING

PHYSICAL MEASUREMENTS AND TESTS

—OF—

MALE COLLEGE STUDENTS,

AND THE

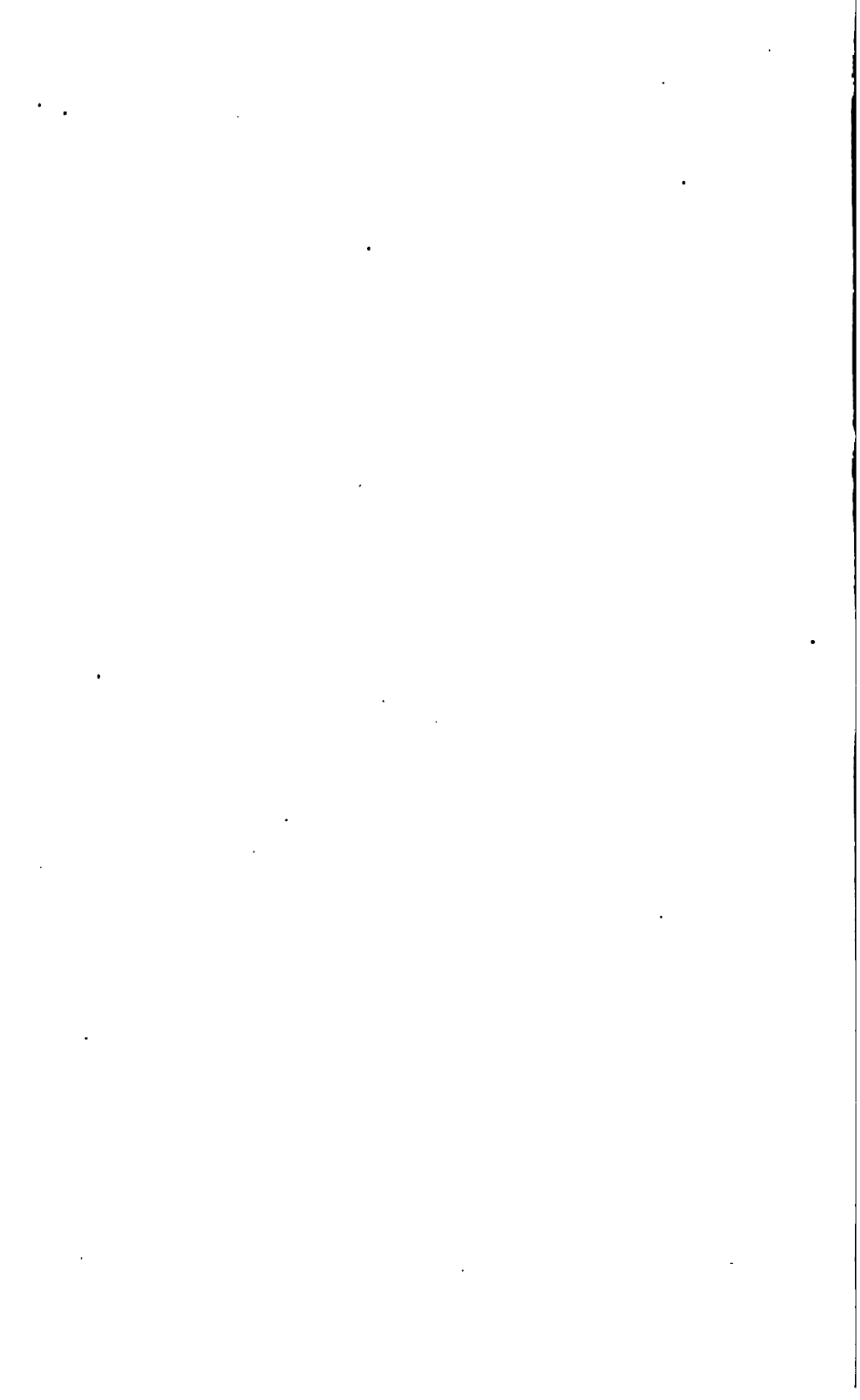
METHOD OF SECURING THEM.

PREPARED FROM THE RECORDS OF THE DEPARTMENT OF HYGIENE
AND PHYSICAL EDUCATION IN AMHERST COLLEGE, DURING
THE YEARS 1861-2 AND 1892-3 INCLUSIVE.

THIRD EDITION.

BY DR. E. HITCHCOCK AND DR. H. H. SEELYE.

AMHERST, MASS. :
PRESS OF CARPENTER & MOREHOUSE,
1898.



THE MANUAL.

When the Department of Hygiene and Physical Education was established in Amherst College, one of the first matters attended to was the Physical measurement and tests of the students. The methods were crude and simple in 1861 and 1862, for the word Anthropometry had hardly found its way into an American Dictionary at that time.

A few simple tests and examinations were made then of every student in the College, and now, with enlargements and improvements made ever since, the last student on the books is number 2647, and the records are all preserved.

A prominent thought in securing these measurements was to take them at least once each year, and thus enable the student to see his own growth. It was also hoped it would show the effect of the new system of Physical Culture upon the College. Besides there was to be presumed a generous rivalry between individuals and the different classes, to determine excellence and superiority. And in the mind of President Stearns—the father of the Department—there was a need to attend to the physical as well as to the intellectual and moral growth of the young men. And closely akin to this was the belief that with a more thorough attention to the physical man the many who were defective, and unable to do their best head work might be improved and made more efficient men now and hereafter. So that if the young man were weak from heredity or poor development, there should attention be given to find out where this weakness was, and ways might be devised to correct and eradicate the non-development.

All this meant the study of the student; what his present condition might be; what he brought with him from father and mother; and what the average young man ought to be as he goes through college.

To learn what is the condition of our young men as they come to us, and how, and in what way can we help them to grow while connected with us, is the ultimate aim of the Anthropometric work of

Amherst College. And the carrying out of this object involves the accurate observation of the physical characteristics of the students, and by a patient and long time process of comparing data, finally enables the Department to declare to them a standard by which they may be judged. And the main results of all this work has been the gathering of thousands of individual numerical records, and many aggregations, compilations, and reductions of these in more or less perfect tables which have been brought to the public from time to time, and are now in constant use.

Every student very naturally enquires, how much should I measure, what is the lung capacity I ought to have, what are the powers of muscle which I ought to possess to be a man of promise now, and of vigor bye and bye.

To answer these questions he must be referred to some ideal standard, or at least to some recognized method of comparison.

The results of this work at Amherst have been put together in different ways; that of the Average College Student, the Class study, the arrangement by the Age of the individuals, the doctrine of Means, of Percentages, the student 21 years old, and the *Stature or Height of the individual*. And as in most of these tables more than a thousand different individuals are compared it does seem possible to give some statements and principles to the class of young men with which they have to do that may be relied upon and worked with.

At Amherst College we have come to the conclusion that Stature or Bodily Height is the *criterion* by which we may judge of the normal conditions of bodily measurements, or, *the unit of comparison for the bodily outlines, capacities, and powers, is the distance from the top of the head to the sole of the foot*.

With this idea in mind every young man who comes to Amherst College is most carefully and minutely examined in his essential bodily parts and powers by an Educated Physician and his exact record made out and furnished to him by the side of the average measures of 1322 students between 17 and 26 years of age with which they may be compared at a glance. The student may not only thus see his own resemblance to or deviation from the men of his own height, but in the manual he will find the directions given him by the examining physician how to correct imperfect or abnormal deviations from the standard. And not only will he of himself and by himself be thus guided, but he may also have the constant oversight and watch of a Physician and a trained and experienced athlete on the Gymnasium floor and in the Athletic Field.

The first beginnings of this scheme were the eight items of age, weight, height, chest girth, arm girth, forearm girth, lung capacity and pull up, which though somewhat enlarged in number were taken from every student from 1861 to about 1880, when more elaborate and multiplied items were suggested by W. T. Brigham of Boston which were methodized and arranged by Dr. D. A. Sargent of Harvard College and so first used here in 1882.

In 1885 the American Association for the Advancement of Physical Education at a meeting in Brooklyn appointed an Anthropometric Committee consisting of Dr. D. A. Sargent of Cambridge, Dr. E. Hitchcock of Amherst, and Dr. W. G. Anderson of Brooklyn to propose a uniform method of taking and securing these statistics. At the meeting of the Association in 1886 this report was made, accepted and adopted by the Association, a copy of which is here inserted. And it is this method which is practically used at Amherst to-day, as the fundamental parts of it have been used for the past 31 years.

DIRECTIONS FOR SECURING ANTHROPOMETRIC MEASUREMENTS OF THE
HUMAN BODY AS ADOPTED BY THE AMERICAN ASSOCIATION FOR
THE ADVANCEMENT OF PHYSICAL EDUCATION.

NUMBER.—In order to secure privacy the individual should be entered in the record book by number. As a means of identification the number can be entered in an alphabetical index book opposite the corresponding name, as :

Smith, John H., 526.

For further convenience it is advisable to enter the name in a numerical index book opposite the corresponding number, as :

526, John H. Smith.

DATE.—Record the year, month, day and hour, as : Jan., '86, 12, 9 A. M. Where perfect accuracy is desired, note should be made of the time that has elapsed since eating, the occupation of previous hours, and of the temperature of the room.

AGE.—Record years and months, as : 21, 9, *i. e.* twenty-one years and nine months.

WEIGHT.—The weight of the body should be taken without clothes. Where this is impracticable the weight of the clothes should be deducted.

HEIGHT.—The height should be taken without shoes and with the head uncovered. The head and figure should be held easily erect, and the heels together. This position is best secured by bringing

the heels, buttocks, the spine between the shoulders and the back of the head in contact with the measuring rod.

HEIGHT OF KNEE.—The subject should place one foot on a box or chair of such a height that the knee is bent at a right angle. A box about 12 inches high is suitable for adults. Press a ruler upwards with a force of about one pound against the ham string tendons close to the calf of the leg. See that the ruler is held in a position at right angles to the vertical rod, and measure the height of the top of the ruler from the box.

HEIGHT SITTING.—Let the subject sit on a hard, flat surface about 12 inches high, such as afforded by a box or chair, with the head and figure easily erect so that the measuring rod will touch the body at the buttocks, between the shoulders, and at the back of the head. Measure the distance from the box to the vertex.

HEIGHT OF PUBES.—With the subject standing easily erect on the box or floor, measure up to the upper edge of the pubic bone.

HEIGHT OF CROTCH.—With the subject standing easily erect on the box or floor facing the vertical rod, press a ruler firmly against the perineum (crotch) and measure the height of the top of the ruler.

HEIGHT OF NAVEL.—With the figure and head of the subject erect, measure the height of the centre of the cicatrix.

HEIGHT OF STERNUM.—With the figure and head of the subject erect, measure the height of the interclavicular notch.

GIRTH OF HEAD.—This measurement should be taken around the head with the tape at the upper edge of the eye brows, over the supra orbital and occipital prominences. All girths should be made on the skin itself and at right angles to the axis of the body or limbs at the point of measurement. No oblique measurements are taken.

GIRTH OF NECK.—With the head of the subject erect, pass the tape around the neck half way between the head and body, or just below the "Adam's apple."

GIRTH OF CHEST.—Pass the tape around the chest so that it shall embrace the scapulae and cover the nipple. The arms of the subject should be held in a horizontal position while the tape is being adjusted and then allowed to hang naturally at the sides. Take the girth here before and after inflation.

Where it is desirable to test the elasticity or extreme mobility of the walls of the chest, a third measurement may be taken after the air has been forced out and the chest contracted to its greatest extent. To test the respiratory power, independent of muscular development,

pass the tape around the body below the pectoral line and the inferior angles of the scapulae, so that the upper edge shall be two inches below the nipples. Take the girth here before and after inflation.

GIRTH OF WAIST.—The waist should be measured at the smallest part after a natural expiration.

GIRTH OF HIPS.—The subject should stand erect with feet together. Pass the tape around the hips above the pubes over the trochanters and the glutei muscles.

GIRTH OF THIGHS.—With the feet of the subject about six inches apart, the muscles set just enough to sustain the equilibrium of the body and the weight distributed equally to each leg in gluteal fold, measure around the thigh just below the nates.

GIRTH OF KNEE.—With the knee of the subject straight and the weight of the body equally supported on both legs, measure over the centre of the patella.

GIRTH OF CALF.—With the heels down and the weight of the body supported equally on both feet, the tape should be placed around the largest part of the calf.

GIRTH OF INSTEP.—Measure around the instep at right angles with the top of the foot, passing a point at the bottom of the foot midway between the end of the great toe and back of the heel.

GIRTH OF UPPER ARM.—With the arm of the subject bent hard at elbow, firmly contracting the biceps and held away from the body in a horizontal position, pass the tape around the greatest prominence. If desirable to find the girth of the upper arm when the biceps is not contracted, the arm should be held in a horizontal position and measured around the most prominent part.

GIRTH OF ELBOW.—Taken around the internal condyle of the humerus while the arm of the subject is straight, with the muscles of the forearm relaxed.

GIRTH OF FOREARM.—Taken around the largest part. The fist should be firmly clinched and the palm of the hand turned upward.

GIRTH OF WRIST.—With the hands of the subject open and the muscles of the forearm relaxed, measure between the styloid process and the hand.

BREADTH OF HEAD.—The breadth of head should be taken at the broadest part. In taking the breadth measurements, stand behind the subject.

BREADTH OF NECK.—Taken at the narrowest part with the head of the subject erect and the muscles of the neck relaxed.

BREADTH OF SHOULDERS.—With the subject standing in a natural position, elbows at the sides, shoulders neither dropped forward nor braced backward, measure the broadest part two inches below the acromion processes.

BREADTH OF WAIST.—Taken at the narrowest part.

BREADTH OF HIPS.—Measure the widest part over the trochanters, while the subject stands with feet together, the weight resting equally on both legs.

BREADTH OF NIPPLES.—Taken from centre to centre with the chest in a natural position.

DEPTH OF CHEST.—Taken after a natural inspiration. Place one foot of the calipers on the sternum midway between the nipples, and the other foot on the spine at such a point that the line of measurement is at right angles with the axis of the spinal column. When it is desirable to ascertain the extent of the antero-posterior movement of the chest, measurements may be taken from the same points after the fullest inspiration and after the fullest expiration.

DEPTH OF ABDOMEN.—Place one foot of the calipers immediately above the navel, the other on the spine at such a point that the line of measurement is at right angles to the axis of the spinal column.

LENGTH OF SHOULDER TO ELBOW.—With the arm of the subject bent sharply at the elbow and held at the side, measure from the top of the acromion process to the olecranon. Care should be taken that the measuring rod is parallel with the humerus and not with the external surface of the arm.

LENGTH FROM ELBOW TO FINGER TIP.—With the arm of the subject bent sharply at the elbow and the rod resting on back of arm and hand, measure from the olecranon process to the tip of the middle finger.

LENGTH OF FOOT.—Take the extreme length of foot from the end of the first or second toe to the back of the heel, about one inch from the surface upon which the foot rests.

STRETCH OF ARMS.—With the arms of subject stretched out horizontally so that both hands and shoulders are in a line, with one middle finger and the zero end of the measuring rod pressed against the wall, note the point to which the other middle finger tip reaches.

HORIZONTAL LENGTH.—With the heels of the subject pressed hard against a perpendicular wall, with arms at the sides and body resting naturally on a horizontal plane, measure the distance of the apex of the head from the wall.

CAPACITY OF LUNGS.—The subject after loosening the clothing about the chest and taking a full inspiration, filling the lungs to their utmost capacity, should blow slowly into the spirometer. Two or three trials may be allowed.

EXPIRATORY STRENGTH.—As before, the subject after loosening the clothing about the chest and filling the lungs completely, should blow with one blast into the manometer. Care should be taken that no air is allowed to escape at the sides of the mouth, and that in expelling the air all the muscles of expiration are brought into play.

STRENGTH OF BACK.—The subject, standing upon the iron foot-rest, with the dynamometer so arranged that when grasping the handles with both hands his body will be inclined forward at an angle of 60° , should take a full breath and without bending the knees, give one hard lift, mostly with the back.

STRENGTH OF LEGS.—The subject while standing on the foot-rest with body and head erect, and chest thrown forward, should sink down, by bending the knees, until the handle grasped rests against the thighs, then taking a full breath, he should lift hard principally with the legs, using the hands to hold the handle in place.

STRENGTH OF CHEST.—The subject with his elbows extended at the sides until the forearms are on the same horizontal plane and holding the dynamometer so that the dial will face outward and the indicator point upward, should take a full breath and push vigorously against the handles, allowing the back of the instrument to press on the chest.

STRENGTH OF UPPER ARMS, TRICEPS.—The subject, while holding the position of rest upon the parallel bars, supporting his weight with arms straight, should let the body down until the chin is level with the bars, and then push it up again until the arms are fully extended. Note the number of times that he can lift himself in this manner.

STRENGTH OF UPPER ARMS, BICEPS.—The subject should grasp a horizontal bar or pair of rings and hang with the feet clear from the floor while the arms are extended. Note the number of times that he can haul his body up until his chin touches the bar or ring.

STRENGTH OF FOREARMS.—The subject, while holding the dynamometer so that the dial is turned inward, should squeeze the spring as hard as possible, first with the right hand then with the left. The strength of the muscles between the shoulders may be tested with the same instrument. The subject, while holding the dynamometer on a level with the chest, should grasp it with handles and pull with both arms from the centre outward.

TOTAL STRENGTH.—The **TOTAL STRENGTH** is purely an arbitrary, and relative, rather than an actual test of strength as its name would indicate. And while confessedly imperfect, it seems decidedly desirable that there should be some method of comparison which does not depend entirely on lifting a dead weight against gravity, or steel springs.

The bodily weight is multiplied by the sum of the "Dip and Pull." (This is divided by ten simply to prevent too great a number of figures in the calculation.) To this is added the strength of back, the strength of legs, the average of the forearms, and the lung strength. The sum is the Total Strength.

For example, the weight of No. — is 64.6 kilos. The Dip is 11, the pull 12=23. The Back Strength is 125, the Leg Strength 150, the Forearms 40 and the Lungs 1.4. Or, $64.6 \times 23 \div 10 + 125 + 150 + 40 + 1.4 = 464.9$.

PILOSITY.—Note the amount of hair on the body and limbs, excluding the head, face and pubes.

COLOR OF HAIR.—*Light* (Very Fair, Fair, Light Brown, Brown). *Dark* (Dark Brown, Black Brown, Black). *Red* (Red Brown, Red, Golden).

COLOR OF EYES.—*Light* (Dark Blue, Blue, Light Blue). *Dark* (Light Brown, Brown, Dark Brown, Black). *Mixed* (Gray, Green).

With these directions fully in mind, the examiner proceeds to take the measures of the student, who is with him in the Statistics Room which is at a temperature between 60° and 70° F. and as near the middle of the day as possible. With the clerk near by who has the college folio record book before him, as well as this manual, the Examiner, first records the name of the person to be examined, the age, the date, and his number as preserved in the College books. The next record is that of the *Height*. If it be perchance 1720 millimeters he turns to the third page of the table, and at the line upon the top of the page among the heavy faced type finds the number 1720. Directly over this he places a V to indicate that this is the column with which the measures are compared; and he also writes 1720 on the left blank space against height. This is the real starting point in the examination, and now the examiner may go on directly down the column if he so pleases, writing the measures against the items on the left. It is, however, generally thought best to inter-

spurse the strength tests with the girths and breadths, and not bunch them, as it may be a hard strain to some persons thus to do, and not give a fair test of the full powers. Perhaps a good way is to take the Pull Up directly after the Height, the Dip after the Wrist measure, and the strength of Legs and Back near the close of the examination. So, too, the Lung tests may be one of the last things taken, as the circulation is then well maintained at the surface of the body and the Lungs free to be inflated.

It is well, however, to use the Stethoscope when the heart is quiet, just before the Pull Up, and again immediately after the same, in order that we may learn if there be irregular action or valvular disturbance. And the condition of the Lungs is ascertained by listening to the breathing at the same time.

The Eyes and Ears may be examined whenever during the process it may be most convenient.

After the examination the Examiner can at his leisure study the case, by comparing it with the column of measures as indicated by the "V" column, as well as from any other information he may gain from questions as to heredity, accidents and sickness if he should chance to make them, and as he does in the Records of Amherst College. By this time he will have learned if there be weak organs or muscles, or non development, which he will at once be in a condition to advise about or prescribe for. And what he may choose to put in writing may be entered, with the state of Eyes, Ears, Heart, Lungs and Muscles on the first page of the Anthropometric Card. And at this point may be entered what apparatus or exercise may be used to correct deficiencies or strengthen weak parts, with special reference to the directions and suggestions about the apparatus of a well furnished gymnasium in the latter part of this manual.

If the measure of Height of the young man falls between the even tens, the column should be selected which gives the nearest unit to it; if half-way between, of course the average of the two columns will be the point of study.

When the Examination is completed the College has in its records every item which the student has in his manual, and several others which the Examiner may need to make use of in giving advice for development, imperfections, or weakness. The College record is only to be seen and consulted by the Department, though every man may see his own record at any time, but not that of his neighbor.

If it is desired to make the examination and record still more complete the following blank may be used.

History and Statistics of

Date,

Age,

Birthplace,

<i>Nationality of</i>	{	<i>Father,</i>
		<i>Mother,</i>
		<i>Paternal Grandfather,</i>
		“ <i>Grandmother,</i>
		<i>Maternal Grandfather,</i>
		“ <i>Grandmother,</i>

Father died of

Mother died of

Hereditary Conditions,

Accidents,

Diseases,

Condition of Thorax,

Condition of Eyes,

Condition of Ears,

Left Handed,

THE
ANTHROPOMETRIC CARD.

OF

Mr.

..... years, months old to-day. No.

His height is millimeters, or inches.

Condition of

Eyes :

Ears :

Heart :

Lungs :

Muscles :

DIRECTIONS AND REMARKS.

HEIGHT,		1600	1610	1620	1630	1640	1650	1660	1670
HEIGHT,		63.0	63.4	63.8	64.2	64.6	65.0	65.5	65.7
WEIGHT.		53.9	54.0	54.1	54.5	54.7	55.5	57.8	57.9
		118.5	118.5	119.0	119.9	120.3	122.1	127.1	127.3
HEIGHTS.	Sternum.	1290	1300	1300	1320	1330	1340	1350	1350
		50.8	51.2	51.2	52.0	52.2	52.8	53.2	53.2
	Navel.	947	958	962	966	974	979	983	986
		37.4	37.8	37.9	38.0	38.4	38.5	38.8	38.9
	Pubes.	797	800	810	812	814	820	835	839
		31.3	31.6	31.9	32.0	32.1	32.3	33.0	33.1
	Knee	425	430	439	442	448	448	450	454
		16.7	16.9	17.3	17.4	17.6	17.6	17.7	17.8
	Sitting.	851	856	869	870	879	880	883	884
		33.5	33.7	34.2	34.3	34.5	34.6	34.7	34.8
GIRTHS.	Head.	559	561	562	562	563	563	565	565
		22.0	22.1	22.1	22.1	22.2	22.2	22.2	22.2
	Neck.	335	338	340	345	345	346	347	348
		13.2	13.4	13.4	13.6	13.6	13.6	13.7	13.7
	Chest	851	852	854	857	857	864	865	868
	Repose.	33.5	33.6	33.7	33.7	33.7	34.0	34.0	34.2
	Chest	881	882	888	900	900	901	903	904
	Full.	34.6	34.7	34.9	35.4	35.4	35.4	35.5	35.5
	Belly.	702	703	703	703	708	709	710	710
		27.7	27.7	27.7	27.7	27.8	28.0	28.0	28.0
	Hips.	860	860	864	864	873	879	881	882
		33.9	33.9	34.0	34.0	34.4	34.6	34.8	34.9
	R. Thigh.	500	501	501	501	503	504	506	509
		19.7	19.7	19.7	19.7	19.8	19.8	19.9	20.0
	L. Thigh.	497	498	498	498	498	500	503	506
		19.5	19.6	19.6	19.6	19.6	19.7	19.8	19.9
	R. Knee.	341	341	342	343	344	346	347	348
		13.4	13.4	13.5	13.5	13.5	13.6	13.7	13.7
	L. Knee.	339	339	340	341	342	344	345	346
		13.3	13.3	13.4	13.4	13.5	13.5	13.6	13.6
	R. Calf.	325	326	333	335	336	337	340	342
		12.8	12.8	13.1	13.2	13.2	13.1	13.4	13.5
	L. Calf.	323	324	333	333	334	335	338	340
		12.7	12.7	13.0	13.1	13.1	13.2	13.3	13.4
	R. Instep.	231	231	232	233	234	236	236	237
		9.1	9.1	9.1	9.2	9.2	9.3	9.3	9.3
	L. Instep.	229	229	230	231	232	233	233	235
		9.0	9.0	9.0	9.1	9.1	9.2	9.2	9.2
	U.R. Arm	275	277	280	280	282	283	285	285
	contracted.	10.8	10.9	11.0	11.0	11.1	11.1	11.2	11.2
	U.R. Arm.	248	248	248	252	253	254	254	254
		9.8	9.8	9.8	9.9	10.0	10.0	10.0	10.0
	U.L. Arm.	244	244	244	248	249	250	250	250
		9.6	9.6	9.6	9.8	9.8	9.8	9.8	9.8
	R. Elbow.	241	241	242	242	242	242	245	245
		9.5	9.5	9.5	9.5	9.5	9.5	9.6	9.6
	L. Elbow.	237	237	238	238	238	238	241	241
		9.3	9.3	9.4	9.4	9.4	9.4	9.5	9.5

HEIGHT,		1600	1610	1620	1630	1640	1650	1660	1670
HEIGHT,		63.0	63.4	63.8	64.2	64.6	65.0	65.4	65.7
GIRTHS.	R. Forearm.	253 10.0	253 10.0	253 10.0	254 10.0	254 10.0	255 10.0	256 1.01	257 1.01
	L. Forearm.	248 9.8	248 9.8	248 9.8	249 9.8	249 9.8	250 9.8	251 9.9	252 9.9
	R. Wrist.	161 6.3	161 6.3	162 6.4	162 6.4	162 6.4	162 6.4	162 6.4	163 6.4
	L. Wrist.	159 6.3	159 6.3	160 6.3	160 6.3	160 6.3	160 6.3	160 6.3	161 6.3
BREADTHS.	Head.	151 5.9	151 5.9	151 5.9	152 6.0	152 6.0	152 6.0	153 6.0	153 6.0
	Neck.	104 4.1	104 4.1	106 4.1	106 4.1	106 4.1	107 4.2	107 4.2	107 4.2
	Shoulders.	413 16.2	416 16.3	418 16.4	419 16.5	423 16.4	424 16.6	429 16.9	431 16.9
	Nipples.	191 7.5	192 7.6	192 7.6	193 7.6	193 7.6	194 7.6	195 7.7	196 7.7
	Waist.	245 9.6	245 9.6	245 9.6	245 9.6	247 9.7	248 9.8	248 9.8	250 9.8
	Hips.	313 12.3	313 12.3	315 12.4	316 12.4	316 12.4	316 12.4	316 12.4	318 12.5
DEPTHS.	Chest.	000 0.00	000 0.00	000 0.00	000 0.00	000 0.00	000 0.00	000 0.00	000 0.00
	Abdomen.	000 0.00	000 0.00	000 0.00	000 0.00	000 0.00	000 0.00	000 0.00	000 0.00
LENGTHS.	Shoulder, Elbow, R.	349 13.7	351 13.8	353 13.9	354 13.9	357 14.0	358 14.1	361 14.2	362 14.2
	Shoulder, Elbow, L.	346 13.6	349 13.7	350 13.8	351 13.8	354 13.9	355 14.0	356 14.0	359 14.1
	R. Elbow Tip.	430 16.9	434 17.1	436 17.2	438 17.2	442 17.2	443 17.4	445 17.5	445 17.5
	L. Elbow Tip.	429 16.9	433 17.1	435 17.1	437 17.2	441 17.4	442 17.4	444 17.5	444 17.5
	R. Foot.	242 9.5	244 9.6	244 9.6	244 9.6	247 9.7	249 9.8	252 9.9	252 9.9
	L. Foot.	241 9.5	243 9.6	243 9.6	243 9.6	246 9.7	248 9.8	251 9.9	251 9.9
	Stretch of Arms.	1660 65.4	1690 66.5	1690 66.5	1690 66.5	1700 66.9	1700 66.9	1700 66.9	1720 67.7
	Horizontal Length.	1610 63.4	1620 63.8	1640 64.6	1650 65.0	1650 65.0	1660 65.4	1680 66.1	1680 66.1
STRENGTHS.	Lungs.	1.3 2.9	1.3 2.9	1.3 3.1	1.2 2.6	1.2 2.6	1.3 2.9	1.2 2.6	1.2 2.6
	Back.	126 278	126 278	126 278	126 278	126 278	127 280	128 282	129 284
	Dip.	8.0	7.3	8.8	8.1	7.4	5.8	7.3	7.0
	Pull.	10.0	10.8	10.6	11.9	10.5	9.2	10.8	10.4
	Legs.	130 287	143 315	147 324	148 326	149 328	150 331	151 333	154 339
	R. Forearm.	34 75	34 75	34 75	36 79	36 79	37 82	37 82	37 82
	L. Forearm.	31 68	31 68	31 68	33 73	33 73	34 75	34 75	34 75
	Total.	428	430	447	459	430	424	423	460
Capacity of Lungs.		3.16 193	3.21 196	3.25 198	3.27 199	3.33 203	3.44 210	3.50 214	3.52 215
Pilosity.		2.2	2.4	2.4	2.5	2.4	2.4	2.3	2.2

HEIGHT,		1680	1690	1700	1710	1720	1730	1740	1750
HEIGHT,		66.1	66.5	66.9	67.3	67.7	68.1	68.5	68.9
WEIGHT.		60.1	60.2	61.3	61.3	61.7	62.1	62.5	63.9
		132.0	132.4	134.8	134.8	135.7	136.6	137.5	140.5
HEIGHTS.	Sternum.	1360	1400	1400	1400	1410	1410	1420	1430
		53.5	55.1	55.1	55.1	55.5	55.5	55.9	56.3
	Navel.	991	1020	1020	1020	1020	1040	1050	1050
		39.0	40.2	40.2	40.2	40.2	40.9	41.3	41.3
	Pubes.	853	862	863	863	867	870	874	880
		33.6	34.0	34.0	34.0	34.1	34.3	34.4	34.6
	Knee.	460	473	474	474	478	484	486	486
		18.1	18.6	18.7	18.7	18.8	19.0	19.1	19.1
	Sitting.	891	905	908	908	910	918	918	918
		35.0	35.6	35.7	35.7	35.8	36.1	36.1	36.1
GIRTHS.	Head.	565	566	571	571	572	572	572	572
		22.2	22.3	22.4	22.4	22.5	22.5	22.5	22.5
	Neck.	348	350	350	352	353	354	354	355
		13.7	13.8	13.8	13.9	13.9	13.9	13.9	14.0
	Chest	872	872	876	880	887	887	889	889
	Repose.	34.3	34.3	34.5	34.6	34.8	34.8	35.0	35.0
	Chest	905	909	913	916	926	930	931	931
	Full.	35.6	35.8	35.9	36.1	36.5	36.6	36.6	36.6
	Belly.	714	722	722	723	723	726	729	731
		28.1	28.4	28.4	28.4	28.4	28.5	28.7	28.7
	Hips.	882	884	886	886	888	895	896	908
		34.7	34.8	34.8	34.8	34.9	35.2	35.3	35.7
	R. Thigh.	517	517	518	519	520	521	522	522
		20.3	20.3	20.4	20.4	20.5	20.5	20.5	20.5
	L. Thigh.	514	514	515	516	517	518	519	519
		20.2	20.2	20.3	20.3	20.3	20.4	20.4	20.4
	R. Knee.	351	352	354	355	357	360	361	364
		13.8	13.9	13.9	14.0	14.0	14.2	14.2	14.3
	L. Knee.	349	350	352	354	355	358	359	361
		13.7	13.8	13.9	13.8	14.0	14.1	14.1	14.2
	R. Calf.	345	345	346	347	347	351	351	351
		13.6	13.6	13.6	13.7	13.7	13.8	13.8	13.8
	L. Calf.	343	343	344	345	345	349	349	349
		13.5	13.5	13.5	13.6	13.6	13.7	13.7	13.7
	R. Instep.	237	237	237	239	241	242	244	244
		9.3	9.3	9.3	9.4	9.5	9.5	9.6	9.6
	L. Instep.	235	235	235	237	239	240	241	241
		9.2	9.2	9.2	9.3	9.4	9.4	9.5	9.5
	U.R. Arm	287	287	290	292	293	295	296	296
	Contracted.	11.3	11.3	11.4	11.5	11.5	11.6	11.6	11.6
	U.R. Arm.	254	257	257	257	260	260	261	261
		10.0	10.1	10.1	10.1	10.2	10.2	10.3	10.3
	U.L. Arm.	250	253	253	253	258	258	257	257
		9.8	10.0	10.0	10.0	10.1	10.1	10.1	10.1
	R. Elbow.	247	249	249	249	252	252	254	254
		9.7	9.8	9.8	9.8	9.9	9.9	10.0	10.0
	L. Elbow.	243	245	245	245	248	248	250	250
		9.6	9.6	9.6	9.6	9.8	9.8	9.8	9.8
	R. Forearm.	258	261	261	262	263	263	263	263
		10.1	10.3	10.3	10.3	10.3	10.3	10.3	10.3
	L. Forearm.	254	256	256	257	258	258	258	258
		10.0	10.1	10.1	10.1	10.1	10.1	10.1	10.1
	R. Wrist.	163	164	166	166	166	167	167	167
		6.4	6.4	6.5	6.5	6.5	6.6	6.6	6.6
	L. Wrist.	161	162	164	164	164	165	165	165
		6.3	6.4	6.4	6.4	6.4	6.5	6.5	6.5

HEIGHT,		1680	1690	1700	1710	1720	1730	1740	1750
HEIGHT,		66.1	66.5	66.9	67.3	67.7	68.1	68.5	68.9
BREADTHS.	Head.	153 6.0	153 6.0	153 6.0	153 6.0	153 6.0	153 6.0	154 6.1	154 6.1
	Neck.	108 4.2	108 4.2	108 4.2	108 4.2	108 4.2	109 4.3	109 4.3	109 4.3
	Shoulder.	431 16.9	431 16.9	431 16.9	431 16.9	432 17.0	432 17.0	432 17.0	433 17.0
	Nipples.	196 7.7	196 7.7	196 7.7	196 7.7	197 7.7	198 7.8	198 7.8	199 7.9
	Waist.	252 9.9	252 9.9	253 10.0	253 10.0	254 10.0	254 10.0	254 10.0	254 10.0
	Hips.	320 12.6	324 12.7	330 13.0	332 13.1	332 13.1	332 13.1	335 13.2	335 13.2
	Shoulder Elbow, R.	366 14.4	366 14.4	367 14.4	368 14.5	369 14.5	369 14.5	371 14.6	376 14.8
	Shoulder Elbow, L.	363 14.3	363 14.3	364 14.3	365 14.4	366 14.4	366 14.4	369 14.5	373 14.7
	R. Elbow Tip.	446 17.6	450 17.7	455 17.9	457 18.0	460 18.1	465 18.3	468 18.4	468 18.4
	L. Elbow Tip.	445 17.5	449 17.7	454 17.9	456 17.9	459 18.1	464 18.3	467 18.4	467 18.4
DEPTH.	Chest.	000 00.0	000 00.0	000 00.0	000 00.0	000 00.0	000 00.0	000 00.0	000 00.0
	Abdomen.	000 00.0	000 00.0	000 00.0	000 00.0	000 00.0	000 00.0	000 00.0	000 00.0
LENGTHS.	R. Foot.	252 9.9	253 10.0	256 10.1	259 10.3	260 10.2	264 10.4	264 10.4	265 10.4
	L. Foot.	251 9.9	252 9.9	255 10.0	258 10.1	259 10.2	263 10.3	263 10.3	264 10.4
	Stretch of Arms..	1730 68.1	1740 68.5	1770 69.7	1770 69.7	1780 70.1	1810 71.3	1810 71.3	1810 71.3
	Horizontal Length.	1690 68.5	1700 68.9	1750 67.7	1760 69.3	1760 69.3	1770 69.7	1770 69.7	1770 69.7
STRENGTHS.	Lungs.	1.2 2.6	1.1 2.4	1.3 2.9	1.1 2.4	1.1 2.4	1.3 2.9	1.2 2.6	1.2 2.6
	Back.	130 287	135 298	136 300	137 301	138 304	140 309	140 309	140 309
	Dip.	8	7	6	6	7	8	6	6
	Pull.	10	9	9	10	9	10	9	9
	Legs.	159 350	160 353	163 359	164 361	164 361	164 361	165 364	167 368
	R. Forearm.	39 88	39 86	40 88	40 88	40 88	40 88	41 90	41 90
	L. Forearm.	36 79	36 79	37 82	37 82	37 82	37 82	38 84	38 84
	Total.	464	436	441	470	482	458	449	476
Capacity of Lungs.		3.54 216	3.60 220	3.63 221	3.66 223	3.78 231	3.90 238	3.91 239	3.94 240
Pilosity.		2.3	2.4	2.2	2.4	2.7	2.5	2.3	2.8

HEIGHT,		1760	1770	1780	1790	1800	1810	1820	1830
HEIGHT,		69.3	69.7	70.1	70.5	70.9	71.3	71.7	72.0
WEIGHT.		65.1	67.8	67.8	68.0	68.2	68.2	68.3	68.3
		143.5	149.5	149.5	149.9	150.3	15.03	150.3	150.6
HEIGHTS.	Sternum.	1440	1450	1450	1460	1470	1480	1480	1500
		56.7	57.1	57.1	57.5	57.9	58.3	58.3	59.3
	Navel.	1060	1060	1070	1080	1090	1090	1090	1107
		41.7	41.7	42.1	42.5	42.9	42.9	42.9	44.1
	Pubes.	886	895	896	899	907	918	919	921
		34.9	35.2	35.2	35.4	35.7	36.1	36.2	36.3
HEIGHTS.	Knee.	489	494	499	500	504	517	519	525
		19.3	19.6	19.7	19.7	19.9	20.3	20.4	20.7
	Sitting.	924	925	925	933	934	937	939	939
		36.4	36.4	36.4	36.7	36.7	36.8	37.0	37.0
GIRTHS.	Head.	573	574	575	576	582	582	583	583
		22.5	22.6	22.6	22.7	22.9	22.9	23.0	23.0
	Neck.	355	355	356	356	356	356	356	356
		14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0
	Chest	890	890	891	893	894	898	898	899
	Repose.	35.0	35.0	35.1	35.2	35.2	35.3	35.3	35.4
	Chest	931	934	936	936	938	939	953	956
	Full.	36.6	36.7	36.8	36.8	36.9	37.0	37.5	37.6
	Belly.	733	738	741	745	748	748	748	749
		29.0	29.0	29.2	29.3	29.4	29.4	29.4	29.5
	Hips.	912	912	912	916	921	921	922	923
		35.9	35.9	35.9	36.1	36.2	36.2	36.3	36.3
	R. Thigh.	522	523	523	523	524	524	526	529
		20.5	20.6	20.6	20.6	20.6	20.6	20.7	20.8
	L. Thigh.	519	519	519	519	522	522	523	527
		20.4	20.4	20.4	20.4	20.5	20.5	20.6	20.7
	R. Knee.	365	366	366	367	369	369	369	369
		14.4	14.4	14.4	14.4	14.5	14.5	14.5	14.5
	L. Knee.	363	364	364	365	367	367	367	367
		14.3	14.3	14.3	14.4	14.4	14.4	14.4	14.4
	R. Calf.	353	353	353	354	354	356	356	356
		13.9	13.9	13.9	13.9	13.9	14.0	14.0	14.0
	L. Calf.	351	351	351	352	352	354	354	354
		13.8	13.8	13.8	13.9	13.9	13.9	13.9	13.9
	R. Instep.	245	245	246	247	247	247	247	247
		9.6	9.6	9.7	9.7	9.7	9.7	9.7	9.7
	L. Instep.	243	243	244	245	245	245	245	245
		9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6
	U.R.Arm	296	296	297	300	300	300	300	300
	Contracted.	11.6	11.6	11.7	11.8	11.8	11.8	11.8	11.8
	U.R.Arm	260	260	261	261	261	262	262	264
		10.2	10.2	10.3	10.3	10.3	10.3	10.3	10.4
	U.L.Arm.	258	258	259	259	259	260	260	262
		10.1	10.1	10.2	10.2	10.2	10.2	10.2	10.3
	R. Elbow.	254	255	255	256	256	256	256	257
		10.0	10.0	10.0	10.1	10.1	10.1	10.1	10.1
	L. Elbow.	250	251	251	252	252	252	252	253
		9.8	9.9	9.9	9.9	9.9	9.9	9.9	10.0
	R.Forearm.	264	265	266	267	268	268	269	269
		10.4	10.4	10.5	10.5	10.5	10.5	10.6	10.6
	L.Forearm.	259	261	261	262	263	263	264	264
		10.2	10.3	10.3	10.3	10.3	10.3	10.4	10.4
	R. Wrist.	168	168	168	169	170	171	171	172
		6.6	6.6	6.6	6.6	6.7	6.7	6.7	6.8
	L. Wrist.	166	166	166	167	168	169	169	170
		6.5	6.5	6.5	6.6	6.6	6.6	6.6	6.7

HEIGHT,		1760	1770	1780	1790	1800	1810	1820	1830
HEIGHT,		69.3	69.7	70.1	70.5	70.9	71.3	71.7	72.0
BREADTHS.	Head.	154 6.1	154 6.1	154 6.1	155 6.1	155 6.2	156 6.2	156 6.2	156 6.2
	Neck.	109 4.3	109 4.3	109 4.3	109 4.3	109 4.3	109 4.3	109 4.3	109 4.3
	Shoulder.	438 17.2	438 17.2	438 17.2	438 17.2	439 17.3	439 17.3	440 17.3	445 17.5
	Nipples.	199 7.9	200 7.9	200 7.9	201 7.9	201 7.9	205 8.1	206 8.1	206 8.1
	Waist.	254 10.0	256 10.1	256 10.1	256 10.1	256 10.1	260 10.2	263 10.3	263 10.3
	Hips.	335 13.2	335 13.2	336 13.2	337 13.3	340 13.4	341 13.4	341 13.4	341 13.4
	R.Shoulder Elbow, R.	381 15.0	382 15.0	384 15.1	395 15.5	396 15.6	396 15.6	397 15.6	398 15.7
	Shoulder Elbow, L.	379 14.9	379 14.9	381 15.0	392 15.4	393 15.5	393 15.5	394 15.5	395 15.5
	R. Elbow Tip.	468 18.4	470 18.5	475 18.7	480 18.9	484 19.0	485 19.1	486 19.1	488 19.2
	L. Elbow Tip.	467 18.4	469 18.5	474 18.7	479 18.9	483 19.0	484 19.0	485 19.1	487 19.2
DEPTHS.	Chest.	000 00.0	000 00.0	000 00.0	000 00.0	000 00.0	000 00.0	000 00.0	000 00.0
	Abdomen.	000 00.0	000 00.0	000 00.0	000 00.0	000 00.0	000 00.0	000 00.0	000 00.0
LENGTHS.	R. Foot.	265 10.4	266 10.5	267 10.5	270 10.6	273 10.7	274 10.8	274 10.8	276 10.9
	L. Foot.	264 10.4	265 10.4	266 10.5	269 10.6	272 10.7	273 10.7	273 10.7	275 10.8
	Stretch of Arms	1810 71.3	1810 71.3	1820 71.7	1850 72.8	1870 73.8	1880 74.0	1890 74.4	1890 74.4
	Horizontal Length	1770 69.7	1780 70.1	1780 70.1	1790 70.5	1790 70.5	1790 70.5	1820 71.7	1840 72.4
STRENGTHS.	Lungs.	1.2 2.6	1.3 2.9	1.2 2.6	1.2 2.6	1.2 2.4	1.2 2.6	1.2 2.4	1.2 2.6
	Back.	141 311	141 311	141 311	142 313	145 320	147 324	147 324	148 326
	Dip.	6	6	6	6	5	4	6	6
	Pull.	8	9	9	8	8	8	8	9
	Legs.	168 370	168 370	169 372	171 377	172 379	173 381	174 384	174 384
	R.Forearm.	41 90	41 90	41 90	42 92	43 95	43 95	43 95	44 97
	L.Forearm.	38 84	38 84	39 88	40 88	40 88	40 88	40 88	41 90
	Total.	469	450	499	456	456	445	467	485
Capacity of Lungs.		4.02 245	4.03 246	4.05 247	4.18 255	4.42 270	4.43 270	4.43 270	4.48 273
Pilosity.		2.6	2.5	2.2	2.3	2.2	2.4	2.6	2.5

ANTHROPOMETRIC APPARATUS.

The **ESSENTIAL APPARATUS** for securing these statistics, and their approximate cost are :

Fairbanks's scales, Metric and English, with measure for heights,	\$16.00
Separate Measure for heights,	8.00
Calipers for depths,	5.50
" " widths,	3.00
Back, Chest and Leg Dynamometer,	50.00
Grip Dynamometer,	10.00
Lung Dynamometer (manometer),	15.00
Spirometer, Hutchinson's,	10.00
Tape,	0.50

ALSO

A Record book or Cards,	\$8.00
A Stethoscope,	4.50
Set of colored worsteds,	1.25
Cards for Eye Tests,	0.50
Two Pairs of Spectacles,	2.00
Tuning Fork,	0.50

The **SCALES** may be procured at any of the agencies of **A. & T. Fairbanks**, St. Johnsbury, Vt. The graduated wooden **MEASURES** can be obtained of **Tiemann & Co.**, New Chambers St., New York, or of **Watts Bros.**, 178 Washington St., Boston; and the **DYNAMOMETERS** also of the same parties or of **Thomas A. Upham**, 17 Harvard Place, Boston. **TAPES** can be procured of **George M. Eddy**, 351 Classon Ave., Brooklyn, N. Y. **Thomas Groom & Co.**, State St., Boston, can furnish **RECORD BOOKS** or **Dr. G. W. Seaver** of Yale University. **N. D. Whitney**, 129 Tremont St., Boston, can furnish **COLORED WORSTEDS**, and the **CARDS FOR EYE TESTS** are to be obtained of **E. B. Meyrowitz**, 104 East 23d St., New York. Also most of this apparatus can be procured of the **Narragansett Machine Company**, Providence, Rhode Island.

Dr. D. A. Sargent of Harvard College, and **Dr. Luther Gulick** of the Training School of the **Y. M. C. Association** at Springfield have each published a pamphlet giving by illustrations essentially the same methods as described in this manual.

DIRECTIONS FOR TESTING THE CONDITION OF THE EYES, EARS, LUNGS, AND HEART.

PREPARED BY DR. H. H. SEELYE.

Procure of any optician two pairs of spectacles, one with convex glasses, No.+.75 Dioptric (equal to No.+.48 in the old or English system), and the other with concave glasses, No.—.75 Dioptric. Also obtain a copy of Monoyer's test letters (a card of Dr. Dennett's modification of Monoyer's test type may be procured of E. B. Meyrowitz, optician, 104 East 23rd St., New York City), to be hung up at 5 meters distance, and a copy of Green's astigmatic lines, in the form of a clock face, to be hung up at the same distance.

Test: Seat the subject at a distance of five meters from the test cards, which should be hung in a good light. Examine each eye separately, keeping the other covered by a card or small book held in front of, but not touching it. Never press the fingers against the closed lid.

There are ten lines of letters on the test card, numbered from .1, .2, .3, etc., up to ten 10ths or 1. If now the subject can read the top line, the smallest letters on the card, with the right eye (R. E.) alone, his vision (V.) is recorded as ten 10ths or 1. ($V. R. E.=1.$) If he sees nothing clearly above the fifth line from the bottom, but can read that correctly, then $V. R. E.=.5$. If he cannot read any of the lines, then $V. R. E.=0$, (*i. e.* less than one-10th). Whatever the vision without glasses may prove to be, *always next* put on the convex spectacles and again cover the other eye. If now he can still with the right eye see as well or better than with no glasses at all, and can read the same line as before, he is Hypermetropic (H.) in that eye. For example, if without glasses it was found that $V. R. E.=.5$, and now after adding the convex glass his V. is improved to .8, the record would be $V. R. E.=.5, +H.=.8$. But if the vision is neither improved or made worse by the convex glass, the record will be thus: $V. R. E.=.5, +H.=.5$. If the convex glass can be used at all without decreasing the vision, no further testing with this card is needed: the subject is hypermetropic in that eye.

If it is found that the vision of the right eye equals 1. without glasses, and the addition of the convex glasses blurs the letters, the eye is Emmetropic, that is, the vision is normal ($V. R. E.=1.$)

If, however, the vision without glasses is less than 1., for instance only .3, and the convex glasses make even that line more indistinct, then put on the *concave* glasses. If now the vision is improved so that a higher line can be read, for instance the eighth from the bottom, the eye is Myopic, or "near sighted," and the record will be V. R. E.=.3,+My.=.8. Or again, if the vision without glasses in the left eye is found to be .7 and then with the concave glasses the top line can be read, the record will stand thus: V. R. E.=.7,+My.=1. After testing each eye separately, place the record of one above the other, for example thus:

$$\begin{cases} \text{V. R. E.}=1. \\ \text{V. L. E.}=6,+My.=9. \end{cases}$$

This completes the testing for simple hypermetropia, myopia and emmetropia.

After testing the eyes as above, if the vision has not yet been made perfect in either, leave on the proper correcting glass, the convex if there is hypermetropia, or the concave if there is myopia, or use no glass if there is neither; then direct the subject's attention with that eye alone, the other being covered, to the card of radiating black lines. If he sees one or more of the lines running in any direction clearer or blacker than those at right angles to them, he is shown to be astigmatic. Either the perpendicular or the horizontal lines usually appear the blackest to the astigmatic person. If the previous record was V.R.E.=.7 and this defect is found, then it will be V.R.E.=.7,+As. Or, if before it read: V.L.E.=.3,+My.=.6, and astigmatism is found, it will read, V.L.E.=.3,+My.=.6,+As. Astigmatism may exist either alone or in combination with My. or H. If alone we might have a record thus: V.R.E.=.6,+As.; V.L.E.=.4,+As., or if with hypermetropia thus: V.R.E.=.7,+H.=.7,+As.; V.L.E.=.6;+H.=.8,+As.

To recapitulate, in brief; if it is found that V.R.E.=1, then the R.E. is either Emmetropic or Hypermetropic. If emmetropic, the convex glass will markedly impair the vision: if hypermetropic it will not. If the V.R.E.=.9 or less, then the R.E. is either hypermetropic, myopic, astigmatic or amblyopic.

1st. If it is H. the convex glass will not greatly impair the vision.

2nd. If it is My. the concave glass will improve V.

3rd. If it is As. one of the radiating lines is blackest.

4th. If neither of these defects exists and the V. is less than .7 then Amblyopia or partial blindness may be recorded. It may read thus: V.L.E.=.6,+Am.

Caution.—Always try the *convex* glass. Never try the *concave* unless the convex glass blurs the vision.

In the following cases the subject should be recommended to consult an oculist concerning the advisability of wearing glasses: If the vision without any glasses is less than .4 in either or both eyes; if he complains of weak, watery or painful eyes, especially in reading, and any degree of hypermetropia or astigmatism is found to exist. These tests determine the nature but not the degree of any defect in vision, in subjects under fifty years of age.

DIRECTIONS FOR TESTING THE COLOR SENSE.

A reliable set of test worsteds of different colors may be procured of N. D. Whitney, 129 Tremont St., Boston. Among these will be found three large test skeins colored light green, purple (pink or rose), and bright red. To make the examination, spread all the worsteds out on a white cloth placed upon a table. First lay the *green* test skein a little to one side of the others, and then tell the subject to throw out of the pile and lay along side of the test skein all the lighter and darker shades of that color, or all the skeins containing a shade of that color in any degree. Avoid naming the color "green" to him. If he throws out only shades of green or light blue his color sense is normal (C.S.N.) and the test is completed. But if in addition he throws out light grays, or any other shade of gray, or light yellows, salmons, or pinks, he is color-blind. If he handles or fumbles over those shades a good deal and hesitates, as if in doubt about them, but yet does not throw them out, he probably has "feeble color sense" (C.S.F.). The examiner in these cases must use his judgment in making a certain amount of allowance for the stupidity of some persons in understanding what is wanted, especially in the young and uneducated.

If the subject is found to be color-blind, next lay down the purple or rose-colored test-skein, in place of the green, in order to determine the nature of the defect. Now tell him to throw out all the different shades of that color. If he only throws out pinks and light reds and shades approaching these he is only partly color-blind. (P.C.B.) But if he throws out decidedly bluish purples, blues, violets, greens, or grays, he is completely color blind.

No further testing is needed, but as a matter of curiosity and to prove the result, the red test skein may next be tried in the same way. If he matches with it browns or greens and grays he is completely color-blind.

The following classes may be recorded:—Color sense normal=C.S.N.; Color sense feeble=C.S.F.; Partial color-blindness=P.C.B.; Complete color-blindness=C.C.B.

Color-blind individuals should be warned against engaging in any occupation where this defect would prove dangerous or inconvenient.

DIRECTIONS FOR TESTING THE CONDITION OF THE EARS.

As tests use a Politzer's Acoumeter or an ordinary watch, a tuning fork and the voice. Having previously learned by a few experiments what is the furthest distance at which the acoumeter or watch tick can be heard by normal ears, make that number of inches the denominator of a fraction, and the hearing distance of each person examined thereafter the numerator. Having found the normal hearing distance (=H.D.) to be, for the watch, for instance, about sixty inches, and that of the subject now examined to be, say forty inches, his record for the right ear would then be: H.D.R.E.= $\frac{40}{60}$. If it had been $\frac{60}{60}$ or 1, the ear would be normal. $\frac{80}{60}$ would show an abnormally acute sense of hearing. If the watch could only be heard while in contact with the ear, it would be recorded: H.D.R.E.= $\frac{0}{60}$. If not heard at all, then H.D.R.E.= $\frac{0}{60}$ or 0. Next test the left ear in the same way.

For the tuning fork test Dr. Clarence J. Blake's pattern is preferred as the standard, though any fork will do. As with the watch test the number of seconds any given fork can be heard to vibrate by the average normal ear must first be determined by each investigator. This number of seconds should be made the denominator of a fraction, the numerator of which will be the number of seconds the note is heard by the individual under examination. The fork is to be set in vibration by pressing the prongs together at the tips with the fingers and suddenly releasing them. Now place the vibrating prongs near the orifice of each ear, alternating constantly from one to the other till it ceases to be heard in either. This gives the numerator of the fraction for each ear. Thus if 40 seconds is the time it ought to be heard in a normal ear, and it is in the case under investigation heard 28 seconds in the right ear and 50 in the left the result might be recorded: T.F.R.E.= $\frac{28}{40}$, T.F.L.E.= $\frac{50}{40}$, meaning the right ear is deaf and the left abnormally acute. T.F.= $\frac{40}{40}$ or 1, would mean the hearing is normal.

Suppose we have found by the watch or fork test that H.D.R.E.= $\frac{0}{60}$, H.D.L.E.=1, this implies some deafness in the right ear, and

again the tuning fork will now help us to decide whether the cause lies in some defect of the auditory nerve or internal ear, or in the external or middle ear or Eustachian tube. Set the fork vibrating and then place the end of the handle against or between the subject's front teeth. If both ears are normal he will probably seem to hear the ringing of the fork equally well in both ears. But if there is a defect in one ear he will either seem to hear it louder or more feebly in the affected ear. If, as in the case we are examining, the fork is heard best in the right, i. e. the deaf ear, this tells us that the deafness is due to some defect in the more external parts of the organ, and it can probably be corrected by appropriate treatment. But if it is best heard in the left, i. e. the good ear, it goes to prove that the defect in the other ear is more deeply seated and probably cannot be greatly benefited by treatment. This effect of the tuning fork is contrary to what would ordinarily be expected, and it is often a matter of surprise to a deaf person to find that he hears with his teeth apparently better on the deaf side. We may now add to our record in this case: T.F. best R.E. If it had been heard equally well in both ears we would record: T.F.=N. (or normal).

For the voice test the examiner stands behind the subject at a definite distance to be determined by experiment with normal ears, and he then pronounces, in a tone of voice which he knows ought to be readily heard, some such series of words as house, man, pen, land, log, fan, round, dog, now, fog, pan, ship, chip, brass, floor, lock, sun, etc., and the subject repeats each one as he hears it. If he makes mistakes his "word hearing" is defective and is to be recorded thus: W.H.=D. or if normal it would read W.H.=N. It will often be found that voice sounds will be easily heard by a person found to be deaf by the watch or fork tests. Where the defect in hearing is at all marked a specialist in ear diseases should be consulted.*

TO EXAMINE THE LUNGS AND HEART.

Procure a Camman's Binaural Stethoscope. Before the subject tries any of the strength tests, let him be seated, and while the breathing and circulation are easy apply the stethoscope to various parts of the chest. The faint respiratory murmur heard everywhere will soon become familiar, and any unusual sounds should be noted as abnormalities. These may be crackling, bubbling or whistling

*For some valuable suggestions as to the hearing tests we are much indebted to Dr. D. A. Sargent of Harvard University and Dr. Clarence G. Blake of Boston.

sounds of varying intensity. Or the respiratory murmur may be abnormally loud or entirely absent. Note whether these sounds change or disappear with deep breathing after violent exercise.

Next listen to the heart sounds. Place the stethoscope over the apex of the heart, one inch below and to the right or inner side of the left nipple. Both sounds should be heard most distinctly here. Then place the instrument two inches above this spot and listen. Then place it two inches below the centre of the top of the sternum, or breast bone, and listen in this vicinity. Any abnormal heart sounds are apt to be heard most distinctly at one of these points. In organic heart disease rough grazing or blowing sounds are heard with one or both of the normal heart sounds. Take no notice of an arterial murmur heard loudest under the outer half of each collar bone, which often closely resembles an abnormal heart murmur, especially after violent exercise.

If all the heart sounds are natural, then let the subject take the arm tests of pulling up or dipping, and immediately after let him be seated again, and then listen to see if the heart and lung sounds are still natural, though intensified by the exertion just made. Also note any irregularity in the rhythm of the heart sounds or any intermission in the beat or great increase of rapidity. There may be such, as functional disturbances, without any organic disease. When the breathing and heart sounds seem abnormal advise consulting a physician.

PRACTICAL DIRECTIONS FOR USING THE DEVELOPING APPARATUS IN PRATT GYMNASIUM, AMHERST COLLEGE.

BY DR. H. H. SEELYE.

GENERAL DIRECTIONS.

Ten or twenty minutes exercise daily is sufficient for any special development that may be desired. The best time is either before or after the regular class exercise.

Perform each exercise *slowly*, and only so long as to induce a slight feeling of fatigue in the part it is desired to develop. Just before closing the exercise may be performed rapidly.

Every new exercise should be indulged in very moderately at first, the amount and severity being increased a little^a every day or two. Use only light weights in the boxes at first, and gradually add to them afterwards. Each day employ in succession all the different means for developing a given part, when a little tired of one machine or exercise going to another and then to a third and so on, and later returning to those used at first.

See that the left side of the body gets as much or a little more exercise than the right, so as to avoid an unequal development.

That a given set of muscles are being most exercised may be known by the fatigue and pain felt in that part after prolonged exertion. A slight amount of aching is all that is desired.

A brief sponge or shower bath after exercising followed by a dry rub is healthy and invigorating.

Don't get discouraged or negligent, because you don't see speedy results. Pluck, time and perseverance will accomplish a great deal.

In the following directions the capital letters in parenthesis correspond to the same letters painted in red on each piece of apparatus referred to.

TO ENLARGE AND STRENGTHEN THE NECK.

Turn the head from side to side, rotating it as rapidly and as far as possible. Stop when a little tired.

Use "Neck Machine" (*C*) 1st. Light weight at beginning. Face machine, stand erect, head strap at back of head. Draw the head slowly back as far as possible. Hold it there for a few seconds. Bow head forward and repeat as above, holding head back a little longer each time. Then repeat the exercise rapidly and continue till slightly tired. Increase the weight every few days.

2nd. Back to machine, stand erect, headstrap around forehead. Bow the head till chin touches chest, stooping a little forward at the same time. Retain a few seconds and repeat slowly and rapidly, as in 1st exercise.

3rd. Left side to machine, head band around right side of head. Bow the head over towards right shoulder. Retain, and repeat slowly and rapidly, as in last exercise.

4th. Right side to machine, reverse exercise 3rd.

TO CORRECT A TENDENCY TO PROJECT THE NECK FORWARD.

Repeat exercise No. 1 more frequently and longer than the others. With head strap at back of head, walk backward as far as possible with body erect. Repeat. In ordinary walking step slowly, body erect, elbows, shoulders and neck held stiffly back, with chin retracted and eyes directed forwards and downwards about 30 feet in front.

TO REMEDY ROUND OR STOOPING SHOULDERS.

In walking step slowly, holding the elbows, shoulders and head back, and the chin down and retracted. Avoid leaning over the table in studying and writing.

Use 1st. "The Chest Weights" (*K*). Face machine, brace first with one foot and then the other, arms extended forwards from the shoulders. Pull one arm outwards and backwards as far as possible, elbows stiff. Hold thus for a few seconds. Repeat slowly till weary. Same exercise with each arm singly, alternating. Increase the weights every few days.

2nd. Chest Expander (*E*). Face machine standing a little back from it. Grasp handles above the head. Fill the lungs. Pull arms downwards, outwards, and backwards as far as possible. Hold a few moments. Empty the lungs. Repeat slowly till slightly weary.

3rd. "Floor Pulleys" (*O*). Face machine standing quite far back. Very light weights at first. Pull arms upwards and backwards as far as possible, elbows stiff. Hold a few moments and repeat slowly till weary.

For heavier exercise use the Travelling Rings and Swinging Rings.

TO INCREASE THE SIZE OF THE CHEST AND THE CAPACITY OF THE LUNGS.

Practice daily holding the breath as long as possible, with the lungs full, chest thrown outwards, and shoulders backwards. Try five or six times at one sitting, increasing the period from thirty seconds at first to two minutes after a month's practice.

Practice Running each day. Begin with two or three laps and run slowly at first, and increase the rapidity and distance daily; continuing till considerably out of breath.

Use 1st. "The Capacity Spirometer" (*Y*) daily. Try three or four times at one sitting, increasing the capacity a little every few days.

2nd. "Chest Expander" (*E*). Face machine standing a little back. Grasp handles with hands above the head. Take a deep full breath and hold it while drawing the arms down to the sides of hips with elbows bent. Now empty the lungs, and then fill them again while the arms are passing upwards to the first position. Hold the breath and return arms to side of hips as at first, but keep the elbows stiff and arms extended at each side. Empty lungs and repeat these movements very slowly till a little tired. Then repeat the same motions with arms extended out in front, lowering the hands to the front of the hips.—Next stand with back to the machine and two or three feet in front of it, keeping one foot in advance of the other and alternating them. Grasp handles with arms upward and backward. Pull them down to the sides of hips. Now fill the lungs, and then let the arms fly backward and upward as far as possible. Holding the breath, bend forwards and again pull the arms downwards and forwards to the sides and a little in front of the hips. Now empty the lungs and again fill them, and then repeat the same motions slowly. Continue till slightly exhausted.

The "Chest Weights" (*K*) or any of the "Pulley Weights" may be used on the same general principles.

3rd. "Quarter Circle" (*F*) or "Sliding Inclined Plane" (*H*). Keep the chest full of air and thrown outwards while lying on the back and pulling the bar downward to the hips. Fill the lungs on the upward movement. Do the same without bending elbows. Repeat slowly till a little tired.

4th. Use "Inclined" (*M*) and "Upright Parallels" (*U*) with lungs inflated.

TO STRENGTHEN AND ENLARGE THE ARM.

1st. For the Upper Arm.—Take any exercise which alternately flexes and extends the elbow. Pulling motions develop the "biceps" muscle on the upper and front part of the arm, and pushing develops the "triceps" on the opposite side.

For the "biceps" use the "chest weights" (*K*), "chest expander" (*E*), "inclined planes" (*F* & *H*), and many of the "pulley weights," and especially the "rowing machine" (*R*). For the triceps use the "dipping machine" (*T*), and "inclined" (*M*) and "upright parallel bars" (*U*), also boxing and the "striking bag" (*I*).

For heavier work, practice on the horizontal bar, rings, and climbing rope and ladders for the biceps, and on the parallel bars for the triceps.

2nd. For the Forearm, Hand and Wrist.—Use any exercise requiring hard grasping or turning the hand. Tennis playing, Indian Club swinging, twirling dumb-bells, Piano playing, etc., are all good. Use the "Finger Machine" (*S*) with light weights, exercising each finger separately and then the whole hand till tired. Squeeze the "Hand Dynamometers" daily as hard as possible for five or six times. Hit the "Striking Bag" (*I*) with clinched fist. Wind up the weight on the "Wrestling Machine" (*X*) by a hand and wrist motion only.

TO DEVELOP AND STRENGTHEN THE ABDOMINAL MUSCLES AND WAIST.

Any exercise which bends the body forward or twists it to either side. Mowing with a scythe, balancing on a tight rope, rowing, wrestling, boxing, bowling, and swinging Indian clubs are all good. Lie on the back and with knees stiff raise the feet up as high as possible. Repeat.

"Inclined Abdominal Machine" (*A*). At first make inclination considerable and later lower it gradually till it reaches the horizontal. Lie on back, and repeatedly bring the body to the sitting posture, keeping feet under the support. Next lie down and grasp the bar above the head, pull it down as far as possible, and when it is in front of the hips come to the sitting posture. Repeat.

Again lying down, raise the body to the sitting posture while holding the bar at arm's length above the head. Repeat. Gradually increase the weight.

"Floor Abdominal Machine" (*Ab*), to be used in the same way as above.

"Upright Parallel Bars" (*U*). Face the strap on either side, grasp the high pulley handle above the head, and pull it down while bowing the body forward over the strap. Repeat.

"Wall Abdominal and Stool" (*Aa*) Sit on stool placed two or three feet from the bar on the wall. Place toes under the bar. Bend body slowly backwards to the horizontal position and then recover. Repeat slow and fast.

"Horizontal Bar." Circle it, hang with legs bent L shape.

"High Pulleys" (*P*) and "Chest Weights" (*K*). Face machines and with both hands pull ropes downward. Side to machine, with one hand pull ropes across abdomen or behind back. Wrestling Machine (*X*), Peristaltic Machine (*G*), Sitting Abdominal Machine (*W*).

TO STRENGTHEN A WEAK BACK.

Use 1st "Floor Pulley Weights" (*O*). Face machine standing a little back. Draw the handles from the floor to the sides of the chest straightening the body at the same time. Repeat. Then after straightening the body continue the pulling with the hands till they are carried above and behind the head as far as possible, with the body bending backward. Hold there for a few seconds, then repeat slowly till tired. Gradually increase the weights.

"Lifting Machine" (*L*), or lift weights from the floor without bending the knees. Increase slowly.

"Rowing Machine" (*R*). Pull with back more than with arms or legs.

"Upright Parallel Bars" (*U*). Back to the strap, face to high pulley, feet under the floor brace. Grasp the handle of high pulley

with both hands, and pull it downwards and backwards till it stops behind the head, and at the same time bend the body back as far as possible over the strap. Repeat slowly till tired.

The "Chest Weights" (*K*) may be used quite similarly.

TO ENLARGE AND STRENGTHEN THE THIGHS.

Practice fast walking and running, throwing the heels high up behind; also skating, kicking, horse-back riding, and lifting weights from the floor with the knees bent. Stoop down with knees bent and then rise to the erect posture, and repeat till tired. Stoop down resting on one knee bent and holding the other leg out straight in front, and again coming to standing position.

Use 1st. "Peristaltic Machine" (*G*) slowly.

2nd. "Rowing Machine" (*R*), push and pull with the feet chiefly.

3rd. "Inclined Leg Machine" (*B*). Lie on back, feet against lower brace, legs flexed, grasp side handles, push the sliding platform up by straightening the legs. Repeat. Then use the upper brace for the feet in same way till tired.

"Floor Pulley Weights" (*O*). Face machine, put one heel in handle. Draw the foot and handle backward and forward. Repeat till tired. Toe in handle, side to machine draw foot across other leg. Back to machine, draw foot forward and upward. Light weights.

TO ENLARGE AND STRENGTHEN THE CALVES, LEGS AND ANKLES.

Practice walking so as to bring pressure against the soles and toes, especially up-hill walking. Run on the toes, not touching the heels. Hop on one foot and then on the other till tired. Jumping and dancing are good. Stand erect on the floor and raise the body on the toes fifty to five hundred times; increase the number daily.

Use "Bicycle Machine" (*Q*), pressing the treads with the toes only.

"Inclined Leg Machine" (*B*), push with the toes instead of the flat foot.

"Foot Machine and Stool" (*N*). Adjust the ball, putting it low at first. Sit on stool, place feet in the straps and work them as on the pedals of a sewing machine. Continue till tired, and a little longer each day.

TO INCREASE THE BODILY WEIGHT.

Exercise all the muscles moderately for a short time daily. Do not become greatly fatigued. Take a short spray bath, with moderately cool water, two or three times a week. Avoid excessive mental exercise, study or worry. Do things quietly and moderately and not with a rush. Lie down and rest, or sleep for half an hour after dinner and supper if possible. Do not study soon after eating. Practice deep breathing and holding the breath, to exercise the diaphragm and stomach.

Retire early at night and sleep as long as possible. If sleepless from brain work, eat a few graham crackers before retiring, to draw the excess of blood from the brain to the stomach. Then bathe the head and back of neck with cold water, and if necessary the feet also and rub them briskly till red and dry. Rise on the toes fifty to one hundred times.

Eat slowly and freely, thoroughly chewing the food. Choose especially the following varieties of food. If any of them causes indigestion take less of that one.

Sugars, syrups, and all sweet things. Fats, fat meats and soups. Sweet vegetables of all kinds. Corn-starch, tapioca and all puddings, cakes, candies and nuts, tea coffee, chocolate and cocoa diluted with much milk and well sweetened. Cream and new milk. Butter, eggs and condiments. All other foods may be indulged in to the extent of the inclination.

Chewing gum daily before eating and between meals increases the flow of saliva, and so aids the digestion of fat-making foods. It also indirectly stimulates the secretion of the digestive juices of the stomach.

TO REDUCE EXCESSIVE BODILY WEIGHT.

Exercise vigorously and long, while warmly dressed, so as to induce profuse and prolonged perspiration. Finish with a warm or hot bath to wash away the old secretions and to induce fresh activity of the skin. Then rub dry in a warm room. Running and fast walking while warmly clothed are beneficial. Turkish baths when possible. Avoid taking too much sleep. Keep the bowels moving freely. Take Epsom or Rochelle salts if necessary.

Restrict the diet and eat moderately.

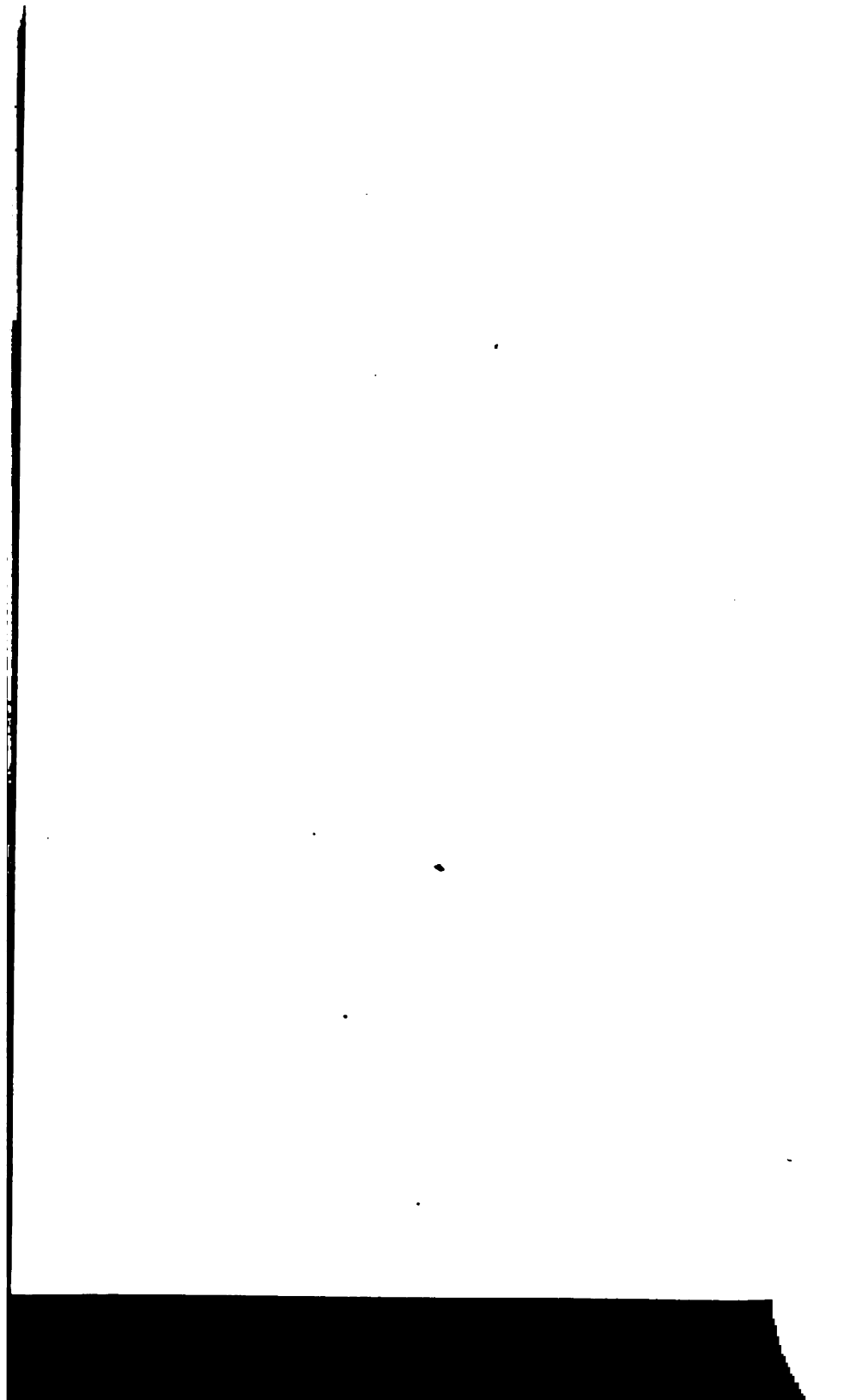
Avoid the following: Fats, sugar and starchy foods. All sweet things, syrups, candies, raisins, sweet potatoes, tapioca, rice, beets, parsnips, olives, custards, cream, ice-cream, pure milk, cake, puddings, nuts, pork, bacon, chocolate and cocoa.

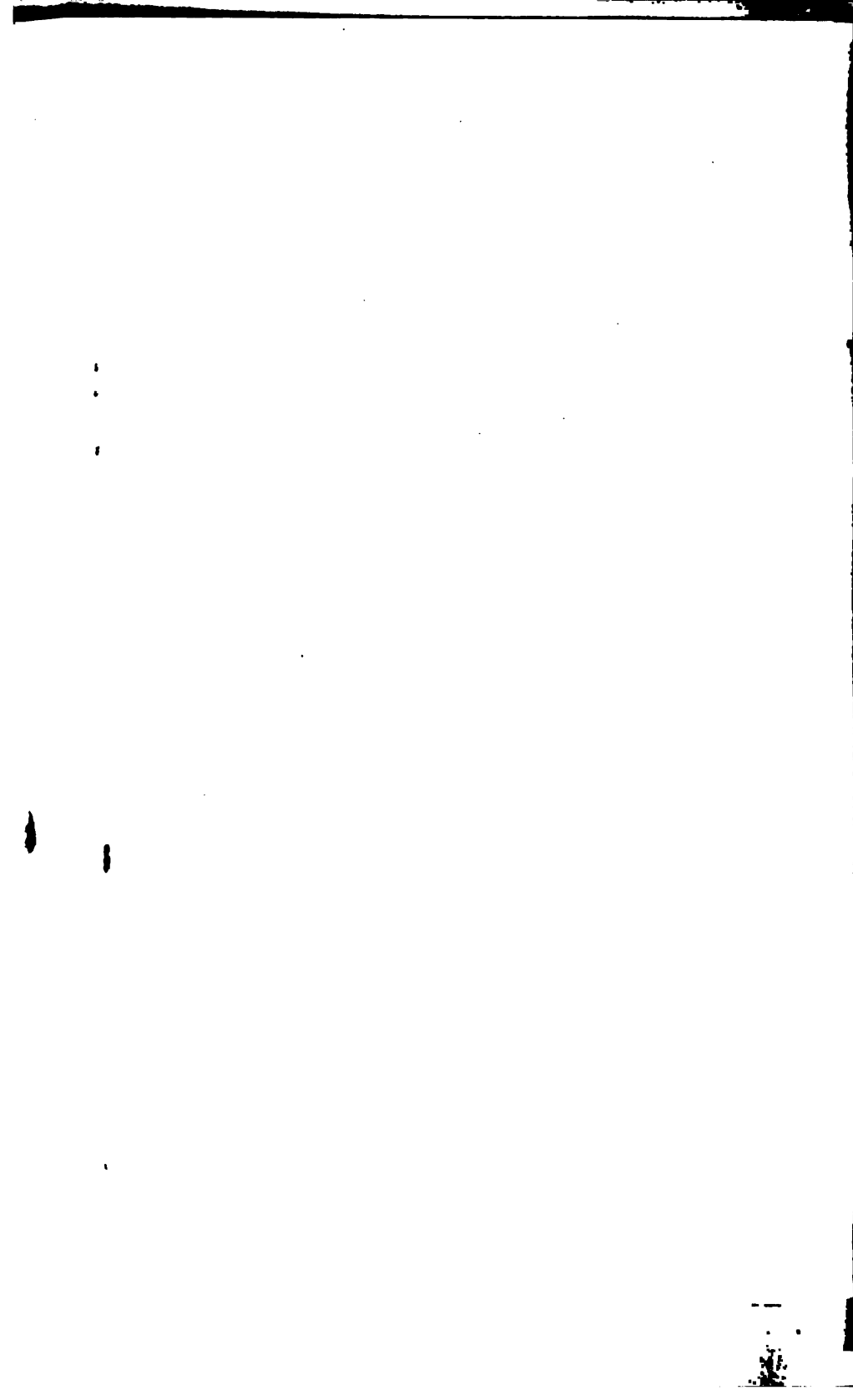
Take sparingly: Potatoes, soups without fat, tea and coffee with little or no sugar and milk, veal, lamb, ham, tongue, mackerel, herring, sardines, oysters, clams, eggs, condiments, sweet fruits, pies, butter, beans, cheese, sour milk and buttermilk.

Eat more freely: Lean beef or mutton not fried, chicken, turkey, dried beef, smoked salmon, fish in general, acid fruits such as apples, grapes, peaches, lemons, oranges, etc., lemon jelly, stale bread, toast, oatmeal, oatmeal and graham crackers, turnips, celery, lettuce, pickles, peas, cabbage, and skim milk.

ANTHROPOMETRIC RECORDS OF AMHERST COLLEGE.

	Millimetres, Kilos, and Litres.	Pounds, Inches.	HELD BY
WEIGHT,	Kilos. 95.1	Pounds. 209.6	Jacobs '91
HEIGHT,	M. m. 1945	Inches. 76.58	Gleason '68
“ Sternum,	1610	63.38	Tower '93
“ Navel,	1234	48.57	Tower '93
“ Pubes,	1008	39.68	Tower '93
“ Knee,	578	22.76	Ludington '91
“ Sitting,	1010	40.70	Brown '92
GIRTH, Head,	630	24.80	Lewis '92
“ Neck,	420	16.13	Knight '91
“ Chest repose,	1095	42.21	Tourtelot '87
“ Chest full,	1085	42.71	Scott, '92
“ Belly,	957	37.77	Moody '92
“ Hips,	1070	42.13	Harlow '87
“ Thighs,	665	25.74	Jacobs '91
“ Knees,	436	16.76	Jacobs '91
“ Calves,	422	16.21	Jacobs '91
“ Insteps,	290	11.02	Dole '89
“ Upper Arms,	346	13.62	Child '84
“ U.R. A. Contracted,	400	15.74	Scott '92
“ Elbows,	295	11.61	Allen '91
“ Forearms,	320	12.60	Tourtelot '87
“ Wrists,	189	7.44	Tufts '84
BREADTH, Head,	174	6.85	Young '86
“ Neck,	131	5.16	Cody '89
“ Shoulders,	512	20.15	Allen '91
“ Nipples,	257	10.12	Harlow '87
“ Waist,	315	12.40	Jacobs '91
“ Hips,	381	14.99	Jacobs '91
“ ShoulderElbows,	435	17.13	Derby '89
“ Elbow Tips,	538	21.18	M. E. Page '86
LENGTH, Feet,	300	11.81	Hardy '87
STRETCH OF ARMS,	2068	81.42	M. E. Page '86
HORIZONTAL LENGTH,	1995	78.54	Gregg '92
STRENGTH of Lungs,	Kilos. 4.0	Pounds. 8.80	Evans '94
“ Back,	295	650.18	Allen '91
“ Legs,	425	936.96	Gill '84
“ Forearms,	74.50	163.90	Alexander '92
“ Chest dip,	No. of times 82		Daniels '90
“ Chest pull up	65		H. H. Seelye '79
CAPACITY OF LUNGS,	Litres. 6.18	Cub. in. 376.0	Blodgett '93
TOTAL STRENGTH,	1058		E. P. Smith '92





THE CHURCH OF THE HOLY TRINITY
AMHERST, MASS.

1911

BACCALAUREATE SERVICE

FRIDAY

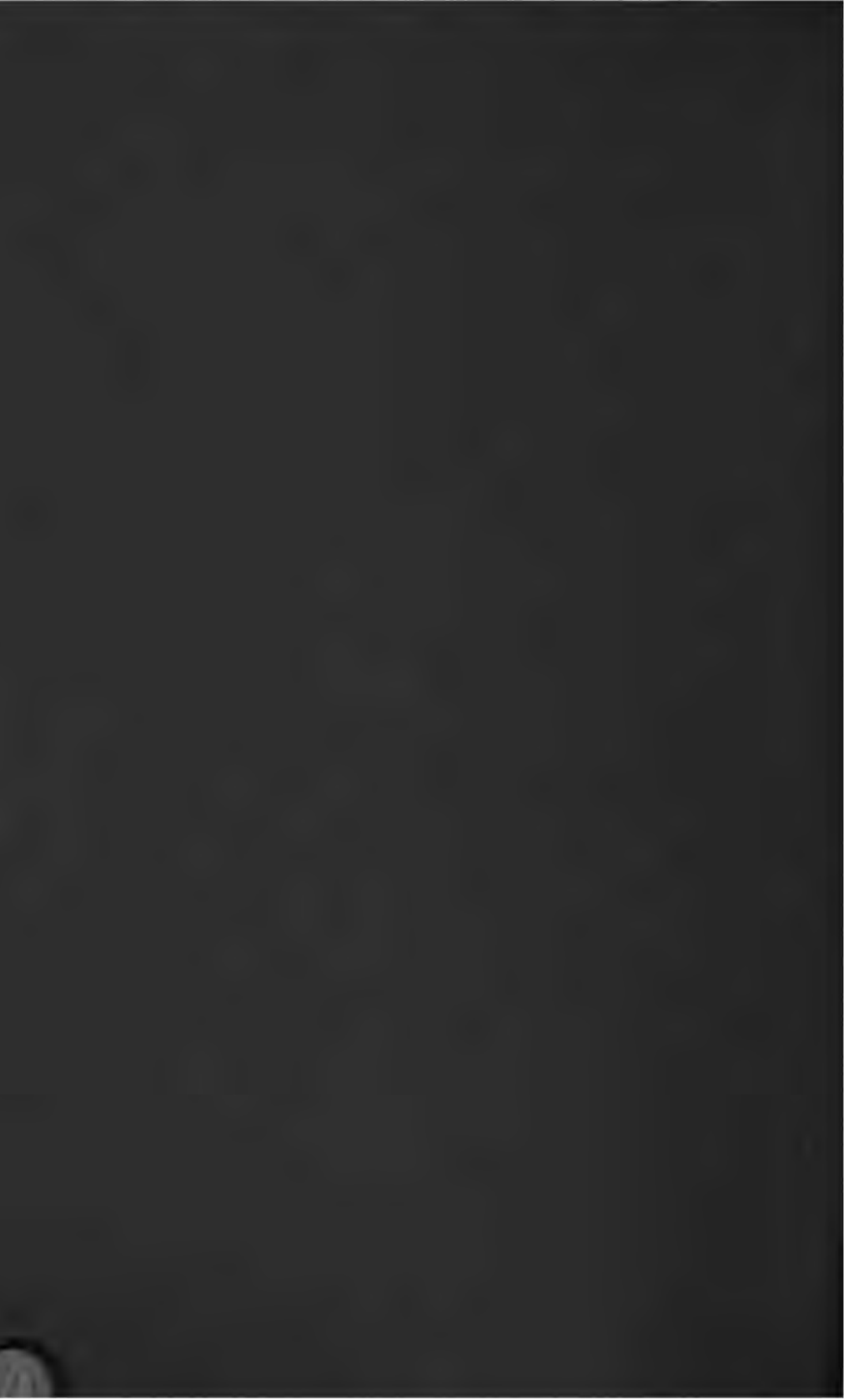
AMHERST COLLEGE

JUNIOR CLASS

AMHERST COLLEGE



AMHERST COLLEGE



THE CHRISTIAN VIEW OF A TIME OF CHANGE

"For if that which is done away was glorious, much more that which remaineth is glorious."—2 Cor. III., 11.

The second letter of Saint Paul to the church at Corinth seems to have been written hurriedly from Macedonia about 58 A. D., when the apostle had reached the age perhaps of fifty-five years.

These two letters to Corinth are the saddest letters in the New Testament, shadowed with that peculiar and noble sadness which ensues where a brave man and leader becomes aware of dishonor, of defection and even treachery among his followers.

Bad news had come from Corinth. The little church there, hardly yet emerged from the turbid surrounding Corinthian tide, had become torn by dissension, and, worse still, invaded by flagrant immorality which had even been tolerated and condoned. A scurrilous attack had been made upon the authority of Saint Paul himself. All this cut the absent leader to the heart and he writes in a tone of amazed but utterly chivalrous expostulation.

Read the entire letter through rapidly from beginning to end, which is the only way to feel the life in anything Paul ever wrote, and one sees how the brave heart bleeds.

Into the midst of this troubled personal warp of the letter, however, there is shot another thread, like gold into gray,—a strain of triumphant, religious faith, regal with the full Pauline vigor and fire of conception and statement, and voicing at the highest level the victorious confidence of his inspired intelligence. The entire context exhibits this latter strain, every phrase a flash, the whole paragraph alive with spiritual valor and swung aloft into the firmament of faith, like the sword handle of some Orion, sparkling with stars.

Among these gems is the text, "If that which is done away was glorious, much more that which remaineth is glorious." Saint Paul forgets his own worries at Corinth—he remembers only the broad

Kingdom of God, the glory of its antecedents, the secret of its continuing power, the law of its progress, the certainty of its ultimate victory.

The peculiar feature in this attitude of mind is that it unites what we should call the conservative and the liberal tones. Our popular habit of thought, as you know, is accustomed to divide them. We are nothing if not extremists in one direction or the other. Our religious discussions, whose too frequent partisan clamour might better befit a wrangle of politicians than a conference of theologians, have forced these two sentiments, the conservative and the liberal, into a false antagonism.

Loyalty to the past has been treated as alien to the progressive modern temper. And thus men who are really brethren have allowed themselves to be driven into hostile camps. Our relish for one-sided and half views of things recalls the satire of Aristophanes in Plato's "Symposium" about the gods splitting men in half after they had made them. Say a generous word for an old creed and you are labelled "conservative." Say an equally generous word for the new criticism, and you are labelled "liberal," and God only knows what would happen if both labels were found on the same coat.

In rebuke to this one-sidedness, Saint Paul's view is as broadly intellectual as it is nobly spiritual. Because he is an apostle of the new economy he does not therefore regard the old with any "contempt, dispraise or blame," to use Milton's phrase. He perceives the dignity and value of the past, while at the same instant he is alive to the fresh moving of the winds of God, and is ready for Providential readjustments.

The old was "glorious." With what noble eagerness the man must have written the word. The old economy was voiced in holy oracles. Through it the prophets had spoken and psalmists sung. At its summit Sinai blazed and the Ten Commandments enunciated the majesty of moral law. It had been the mother of a majestic and fervid patriotism. It was forever eloquent with the sentiment of duty and the vision of God. Even the ancient forms which had clothed it were glorious, because suited to their day, and the principle of suiting form to environment survived still in other forms equally suited to a different environment. More than this, the very soul of the past lived on in the new economy. Christianity had not so much sup-

planted Judaism as supplemented it and fulfilled it. Saint Paul is not a critic observing a transition so much as he is a prophet announcing an evolution. He would have felt little sympathy with our cheap chaff about archaic and obsolete creeds and the men and methods of ancient days. To him the old was the mother of the new. The law of heredity, to use our modern phrase, applied also to these vaster processes of the divine Kingdom. The God of the past in *its* form was the God of the present in *its* form, and the mind of the apostle, alive to this continued divine rhythm in the stream of things, flames up in loyalty and joy. The past had been glorious, much more the present and the future.

Here then is the principle of the rational Christian optimism in times of agitation and change, of which I beg to speak one simple word to-day. This Christian optimism in tumultuous times is distinctly and specifically non-partisan. It possesses two chief characteristics: First it honors the past, and secondly at the same time it believes in development and therefore it glories alike in the continuity of substance and in the change of form. Things are getting better, so it believes, because to start with there was more good than evil, and the ratio of preponderance of good over evil is all the while increasing. It believes that God is ever forcing the fighting with a swifter stroke. In its judgment the past and the future are all of a piece. In its broad vision, reason and faith coalesce. The "law of evolution" and the "march of the divine Providence" are two ways of expressing the same fact. This is the logic of the message of the text.

May I venture this morning to waive any precedent which might employ such an occasion as this for the purposes of speculative discussion, and in the simplest and most practical way speak of this principle of our text in relation to two or three phases of current affairs?

I.

First.—We might, I think, without impropriety, apply it in our estimate of present *civil conditions* in this country.

The civil sentiment was, as everybody knows, a part of religion in the Jewish mind, as it is in the Puritan mind, and the Pauline thought in the text includes without doubt the note of the patriot.

It is a text for the patriotism of faith. In contrast to it we have the pessimism of our current political criticism. There is time to-day, however, for only the briefest allusion to that plausible but fallacious current opinion which finds in the recent political changes and expansions of the American horizon a menace to national integrity and even an herald of national decay. This is no occasion for discussing the details of policies.—Nor is it necessary to defend every feature of the new political ideals.—We are only concerned to identify the general attitude of Christian patriotism.

No one would be so foolish as to assert that there is no reason for anxiety. No doubt there is danger of the intrusion here upon these shores of that foreign sentiment which we call imperialism. War for territorial expansion is un-American, and I for one believe that the men who, in public life or in academic halls, in the face of whatever criticism, have called our attention to this danger, have rendered an important public service.

And yet is not the deeper truth on the other side? Expansion would be a curse were our people to forget the ancient axioms of national faith—were they to forget that the Republic of America fights only to set men free. But they will not forget it! It is a part of the authority of our national history that we shall not forget it. It is a part of the law of national evolution that we cannot forget it. It is a part, may we not reverently say, of the order of the Divine leading that we shall not be permitted to forget it. Evolutionists and Christians must not extol everything down to Appomattox, and then bemoan Santiago and Manila. Yonder bugles across the Pacific are sounding no retreat for the American idea.

Has God so finished His work in this land and with this land that an alien militarism can in a twelvemonth reverse the lessons of a hundred years, and capture and corrupt our national life? Even the Spanish war was, we may suppose, no particular surprise to the Almighty! Development, not deterioration, is yet the master music of our law. Nations do not produce Deweys when they are on the way down. We have not yet so lost the ascendancy of first principles that we must discredit the verdict of majorities or the patriotism of Presidents.

"Governments," said William Penn, "are like clocks; they go from the motion men give them." Think of the motion men have given to this American clock of ours! Can the hands of the dial sq

easily turn back after a century and travel in the reverse direction? If we measure the forces first launched upon the wilderness, listen to the ring of the flint-locks on Colonial church floors, recall the solemn passion of the Revolutionary struggle, count the quickening pulse of the national life for a hundred years down to Gettysburg, down to to-day, we shall see that the heart of the old has always lived in the changing forms of the new. Our flag still floats, not for selfish aggrandizement, but to set the people free. The higher patriotism still must echo the immortal optimism of that Cilician missionary who even in troubled times dared to assert "if that which is done away was glorious, much more that which remaineth is glorious."

II.

Secondly.—Another practical application of the principle of the text relates to the *changed point of view* both in Saint Paul's time and ours regarding the *Holy Scriptures*.

Saint Paul's reverence for the sacred oracles of the Jews is manifest. He is continually quoting those oracles. They furnish the staple of much of his preaching. And yet we do not need to assume his authorship, direct or indirect, of the Book of Hebrews in order to prove that he clearly recognizes and daringly adopts a new point of view concerning the sacred writings,—a more spiritual method of interpreting them. Paul also was a higher critic in the true sense, that is, his criticism was spiritual insight and served to set the old writing on a higher plane than ever of spiritual meaning and divine authority.

But that is not all. Now comes in the special and superb note. Saint Paul does not on any account repudiate the older way of regarding the Scriptures. The older Jewish sentiment concerning the Holy Oracles was essentially true whatever its defects and limitations. Although the traditional interpretation was now to be superseded by the more spiritual one, the time for which had come in the providence of God, yet the old way had been "glorious." Reverent to the old and at the same time generous toward the new. Such was the attitude of this man Paul.

Now this is the double note which it seems to me should be struck to-day in our present critical controversies respecting the Bible. For are we not forgetting our unities in fighting over our differences?

One perceives a certain wisdom as well as wit in the English collier whom the bishop catechised in theology and asked him "Well, my man, what do you believe?" "My lord, I believe what the church believes." "Well, I know, but what does the church believe?" "The church, my lord, believes what I believe." "Ah! but what do you and the church both believe?" "Well, my lord, if you must know, then the church and I both believe the *same thing*."

But think of our partisan intolerance on both the conservative and liberal side, for the conservatives have no monopoly of such injustice. One hesitates to speak precisely as he feels of this partisan temper lest the mildest language which is also true might seem harsh and severe. It is not that we complain of such an utterance for example on the conservative side as the recent declaration of the Presbyterian General Assembly, that the Holy Spirit did so control the writers of the Bible "as to make their statements absolutely truthful, that is, free from error when interpreted in their natural and intended sense." This position we may think untenable, but yet it is one of orthodox dignity. We are not to depreciate it. But from this as an alleged basis, the partisan conservatism of which we do complain rushes on to denounce as irreverent and heretical all contrary opinion as to the method of inspiration. This partisan conservatism scouts the notion that a development in the order of revelation may have been part of the plan of God. It would have shut the mouth of Saint Paul himself in his new way of handling the Old Testament. It disparages all scholarship but its own. It distorts and perverts the language of Christian ministers. It idolizes tradition, especially that comparatively recent tradition of the seventeenth century. It introduces under the protestant flag the similitude of ultramontane arrogance, and seeks to clothe sectarian tribunals with a quasi-divine authority.

Now I insist that this partisan temper must not be credited to any one of our great protestant communions as such. It is *partisan* conservatism, but something of it is widespread. It is a temper easy to slide into, as we say, thinking to do God service. In some quarters it is popular. It poses as a "defender of the faith," but it is as far from the spirit of Christ and from the spirit of this text as a battle-ax is from a binocular lens.

Now all this might be an ungenerous and unjust thing to say if, at the same time and in the opposite direction, we did not equally

deprecate the spirit of partisan *liberalism*. For this is equally if not even more offensive, though not so widespread or sanctimonious. It is the intellectual counterfeit of true liberality. Ambitious to be "critical," it becomes conceited and patronizing. It is proud of its facility in picking flaws. It flaunts its pert challenge against the splendid and tremendous past. Talking loudly of the law of evolution, it dishonors the logic of that very law by disparaging its own antecedents and discrowning its own ancestors, shelving with scant courtesy the conservative veteran whose shoe's latchet it is not worthy to unloose, as a "fossil" and "back-number." In its practical influence also this partisan liberalism is misleading. It unsettles men and does not seem to care. It throws its emphasis on the side of doubt, rather than of faith. It attacks dogma, but puts nothing better in its place. Its whole air is that of the critic rather than that of the believer. It lacks reverence; it lacks earnestness; it lacks religious passion, and flourishes the latest speculative hypotheses as though God had come to town but yesterday,—as though the idea that Christ has been present and prevalent in His church from the beginning were an amiable dream.

Again I reassert with utmost emphasis that this is not the attitude of the really fine critical scholarship of the day, nor is it the attitude of the true leaders of progressive thought on either side the sea, but it is the attitude of a certain *partisan* liberalism, manifest not so much in formal statements as in chance quips and flings. But here and there it appears, and is driving some earnest souls into conservative reaction, if not into bewilderment, bitterness and scorn. It is hurting our churches and causing heavy hearts in many homes.

Now, how noble in contrast to both these phases of partisan prejudice is the large and rational Christian philosophy of Saint Paul! "If that which is done away was glorious"—as it was—"much more that which remaineth is glorious." What was grand and true in the old view of the Scriptures will be carried on and survive in a new view of the Scriptures which will perpetuate the essence of the old and yet add something more and larger. Let us, as Wordsworth says, "Come forth into the light of things." What shallow fallacy to assume that the contrast between the Puritan view of the Bible and the modern more critical view of it is simply the contrast between the false and the true, the discredited and the verified! To my mind it seems rather the contrast between the good and some-

thing still better. The path of true science curves upward by a kind of spiral,—from faith through doubt, around to faith again, but on a higher and still more rational level. We are not to surrender reason, as Pascal and Newman did, nor are we to surrender faith as Darwin did. For we are protestants. And what is protestantism? Protestantism is the indissoluble union of intelligence and faith, with justice to both, with detriment to neither. This genius of protestantism is dual—it asserts both the duty of faith and the right of reason; and if any man declares that the two are inconsistent, he has not reached the living nerve of modern Christian civilization. This was the heart of the old protestantism, and it is the heart of the new protestantism and will live on.

The present is an hour when every man that believes anything should stand for all the faith he has, and when every other man should be glad to have him do it. It is not the time to air the doubts we have, so much as to proclaim the faith we have.

A few days ago an unwonted breeze seemed for a moment to rustle the draperies and make the lamps flare by the altars among our brethren of the Episcopal communion, when a prominent scholar was to take the order of the Episcopal priesthood. But the breeze died away and all that remained evident was that the Bishop of New York held his shepherd's crook in his *own* hand, and that the door *into* Episcopacy was about as "open" as the door *out* of Presbyterianism. But what then! What if both doors were the *same door*, swinging one way rather than the other, as most doors do that amount to anything? And what if these two adjacent rooms with the one-way-swinging door between them—the more exclusive room of the Presbyterian communion and the more inclusive room of the Episcopal communion—are after all both of them legitimate rooms in the one House and Temple of the Lord our God? As for us Congregationalists, we are down on the democratic ground floor, and we will be glad to take in a Presbyterian or even an Episcopalian if he chooses. Perhaps one exclusive and one inclusive in their balance and interplay work better and are worth more to American civilization than two exclusives or two inclusives. We need some brakemen as well as some stokers on the gospel train.

The "administration" of the one "Spirit" involves "diversities of operations," just as all practical industries depend upon the oppo-

sition between thumb and finger pressing against each other, and so holding things; but it would be a pity if thumb and finger should consider themselves as combative rather than co-operative. We must remember where our divergencies overlap and become our fraternities. Breadth is the thing. The person on the other side of the fence is also a "man and a brother." He may even be a Christian!

No sane man would carry this so far as to advocate a colorless neutrality, without preferences, without muscle and blood. But is there not a way of preparing ourselves for the finest work in the opening decades of the new century by training our minds to feel something of the truth on both sides in these great issues between conscientious men? Is not this the highest reason as well as the most Christlike charity?

III.

Thirdly and finally.—The principle of the text finds application to the changed point of view both in Saint Paul's time and our own regarding the *Church*, in its relation to current social conditions. For Saint Paul in his age, and for us in our age, our text was and is the true maxim for the new Christian democracy, the true keynote for the broadly humanitarian rather than the provincial and ecclesiastical conception of the Church's errand.

Saint Paul was the apostle of a new social idea. He was the apostle to the Gentiles. His pulpit was a ship. He was the first cosmopolitan Christian, the first to feel the genius of his Master's democracy,—the Christian passion for man as such, irrespective of race or class or traditional cleavage in Church or state. Yet, and here is the splendid note again, Saint Paul more than any other man of his time felt his soul stirred with sympathy for the Jew. He employs language of almost extravagant intensity and "could wish himself accursed from Christ" for his "kinsmen according to the flesh." Now this union of a certain noble respect for the old though provincial social fabric, together with the freshest and broadest humanitarian enthusiasm, is the tone for us to-day.

It is mere platitude to dwell upon the social outlook. It is, as we say, bewildering, exciting, yet disquieting. We are in the midst of vast and often violent movements for social reconstruction. Some

of these movements are revolutionary to the last degree. Here in America the bottom of society is being constantly thrown to the top. Mr. A. for example, was a day laborer, but his son commands armies. Mr. B., forty years ago, was a half-starved freshman, boarding himself at Amherst; to-day, he is a bank president and worth millions. "God Almighty's gentlemen," to employ a phrase of Dryden, are as apt to be found in the cab of the locomotive as in the parlor car. The poor boy is only the rich man in the bud and gristle. One class shifts into another while we are looking at it. Society is a boiling caldron in which all the old "fixed facts," as we used to call them, are anything but fixed, and are tossed to and fro in tumultuous confusion.

Many of these novel social phenomena are grouped under the name "socialism," and how startling has been its growth! The first volume of Karl Marx's "Capital," the "socialist's bible," as you know it has been called, was not published until 1867. To-day, half the German Rhine is a socialistic raceway, and one-fifth of the voting force of Germany is socialistic. In France, of course, but in Austria and Italy as well, irreverent fingers are eager to untie the mitres of priests as well as the crowns of kings and tumble them together in the dust. Even yonder in conservative England the axes glitter in the air to hew down the fabric of the Church Establishment, and the democratic impulse is held back from open assault upon the throne only by the old deep reverence in the sub-cellar of the Anglo-Saxon mind for blended worth and womanhood, in the person of the Queen.

How is it in this country? Agitation is not perhaps so violent because it has a freer range, but it is evident enough. Chairs of sociology are established in our colleges, representing departments even which were unheard of twenty-five years ago. An entire and brilliant literature of social science has sprung into life within fifteen years. Societies, clubs, guilds are formed and rapidly forming in all our cities to discuss the questions of local government and social reform: the finest brains of the time are discussing the methods of new social co-operation. All this, of course, affects the churches. The incoming classes are no longer church-goers.

One peculiar feature of the situation is that the great artisan classes are drawing a sharp distinction between the Church and Jesus Christ. Three years ago while I happened to be in London, this incident occurred. You will remember at Trafalgar Square, at the West end of the Strand, the great fluted column of the Nelson monument and, below,

facing away from the central pedestal, Landseer's colossal lions, looking to the four quarters of the compass. At the moment to which I am now referring, on the broad stone platform on the north side, looking into the Square, a workingman was speaking. He wore the short coat of the artisan. With rude, strong diction his sentences fell like cannon shot out upon the crowd,—a crowd not of rioters or imbeciles, but of sober wage-earners, with here and there a worn face telling of misery and starvation. The orator spoke of the infernal sweating system in London—of child labor in the factories, of the abominable horrors which go on in the mines. With fierce invective, he assails what he thinks is responsible for all this,—the tyranny of corporations, the selfishness of the moneyed classes, and especially the aristocracy of the Church. At a chance turn of his impassioned address, the speaker happened to allude to the name of Jesus Christ, and, instantly, that crowd burst into a cheer and cried—Hurrah for Jesus Christ!—while the orator's references to the Church were responded to with hisses and groans. But yonder comes the line of helmeted policemen. The meeting is to be dispersed, and dispersed it is; but as the crowd broke up, the sullen throng of men rolled down Whitehall street and back up the Strand, still shouting their strange, incongruous cry—Hurrah for Jesus Christ! Down with the Church!

Those men were mistaken; but, my friends, it is only the right kind of church that will correct this mistake.

In the midst of all this tumult and change it is easy to be frightened, and many good men are frightened. It is easy to be faithless, and many good men are faithless. But the truer view is the resolute, rational optimism which insists upon seeing the presence of God and the push of His hand in the midst of, beneath and behind these menacing phenomena. It is just such an agitated sea that Christ comes walking on the waves of. For many of these modern developments are fulfillments of what has all along been struggling up through the ages. The philosophy of social evolution demands that we respect the ancient germs of modern growths and also respect the modern growths themselves. Historical science must be at once critical and reverential.

Let us be just. The modern social unrest is not at bottom a symptom of wickedness. It is a symptom of life. It is a testimony to the fact that eighteenth century individualism is not humanity's last word. Voltaire shot his arrows at his own caricatures of Christi-

anity, not at Christianity. Christianity is at bottom *comradeship*,—the cause of the people. The socialistic methods are fugitive and temporary. But the thing aimed at is not fugitive. Torches are not trowels. To tear down is easy; to build up is hard and Christian. The people are wrong in looking for their deliverances to socialistic devices, but they are right in their social enthusiasm, in their expectation of deliverance itself, in their belief in a finer social readjustment.

Let us dismiss then that tainted title "Socialism." The coming monarch of the twentieth century is *Christian Fraternalism*,—some fresh union of social sympathy and spiritual mastery.

Where then in this condition of affairs does the principle of our text appear and apply. Let us see. Three methods of securing church efficiency have been tried in the past. 1st. One was by insisting upon doctrinal agreement. But men to-day do not care for the anathemas which thunder, for example, at both terminals of the Athanasian creed.—"Whosoever will be saved, before all things it is necessary that he hold the universal faith, which faith except everyone doth keep whole and undefiled, without doubt he shall perish everlastingly." No sane protestant believes that now. The world has grown too large for anathemas.

2nd. A second method of securing church efficiency was that of ecclesiastical authority. But the ponderous authority of traditional ecclesiasticism, whether that of the Vatican or of its Anglican imitators, will not be most influential with an age which is nothing if not democratic, whose passion is liberty, whose joy is in the exercise of popular power, whose whole spirit is daring, almost defiant toward any arrogation of authority.

3rd. A third method tried in the past to which some are especially looking still for securing church efficiency is by artistic and elevated rituals, by the refinement of poetic sentiments, by a passionate sense of fellowship in worship, beneath the spell of rich, sweet notes from the mystic vales of faith. God forbid that any unsympathetic word be spoken of this spiritual exaltation. But it can hardly fully meet the demand of a time which is fired with the ardours of practical enterprise and which in its strenuous race is flinging aside fineries, even the fineries of the mind. It is not an age for the monk or the devotee. But what then—are we bluntly to disparage and dismiss these three ideals of the church, because they do not fully meet the demands of

the present hour? That is our cheap, shallow, partisan conclusion. On the contrary we are to honor these older methods, and employ them still in modified forms. They were "glorious." They possessed immortal worth and value. They did their work. The heart of them forever lives. But we say, and say rightly, something more is called for. What then is that something more? Not something "*new*" merely? There again is our partisan mistake. What is needed is the reproduction of the Christian spirit of all the ages in the form of a fresh social enthusiasm. Here is the note of our text. Is this a fantastic conception? I cannot think so.

In a socialistic era the question is, how shall the church meet the time? And the answer is, the church must be filled with a freshened sense of fellowship with men, only with *all men*, past men and present men, "Nicene" men and "new theology" men, the men of the old creeds and the men of the new creeds and the men of no creeds at all. Is it a dream that the historic faith, the common faith and feeling of the Christian ages, may now reappear, but not now as a rigid intellectual bondage, but under a more social form as a sense of *fellowship* with the men of the past, to whom Christ spoke as well as to us? "If that which is done away was glorious, much more that which remaineth is glorious," because in it the old survives.

Some of my friends say to me, what makes you adhere to the old creeds? You are liberal, why do you not come out with your true color? I answer, because my true color is not all red, or all white, or all blue. There is some blue in it. It is blue enough in spots to satisfy any old school Presbyterian living, but the radical red is in it too, and, please God, I hope some touch also of the white. But I will not be a partisan. I will not be labelled. I will be a patriot in God's republic of *men*. I will not give up the old ages, nor will I shut my doors against the new.

A veteran minister said to me the other day: "We are all going to — Jericho." (That was a pious and perfectly safe terminal!) "The church is becoming secularized." Well, we might reply, so it ought to be in the true sense of that noble Latin word. Anathemas are often compliments. The church should become of the *sæculum* because it is of the *sæcula*. It reproduces all the ages in the dialect of this age. The old leaven must be put in the new meal.

Not long since I asked a man why he did not come to church. "Because," he said, "you ministers do not speak in language which

I can understand. It is not the language of practical life." Well, I understood *his* language in that instance. The church must retranslate Christ to the time we live in. This it seems to me is the supreme note for the hour—*comradeship with men*, only with *all* men, past men and present men, in Christ's name.

The church for the times will emphasize the work of the laity. Membership in it will mean service. The minister will no longer be chairman of all committees, with the theory that the chairman is to do all of the work. The church will address itself to practical enterprises, to definite, concrete ministries. It will keep Love's path open and worn from the church door to the hospital. Its spirit will be ethical, fraternal, free, humane, while yet glowing evermore with the sense of the Presence of Him who, to use Richter's splendid phrase, is "Holiest among the Mighty, and Mightiest among the Holy, Who with His pierced hands has lifted the gates of empires off their hinges and turned the course of history into other channels." This is the church for the times,—the reincarnation of the Incarnation. This is Christ in the times.

I am speaking too long, but I am sure it is not against the propriety of this occasion nor an invasion of that privacy which is part of the dignity of personal manhood, to say in closing that we find in this principle of the text the true maxim for a man's inner life. I believe that the question of the future of this land is the question—what type of manhood shall become prevalent in the Republic? And I believe that the *colleges* of America will set that type. Shall that typical American of the coming decades be a man who cares for symmetry as well as for strength and for spirituality as a part of that symmetry? Shall that American type which the colleges create be reverent while yet free, combine the chivalry of conservatism with the chivalry of progress? Shall it be fair to the old while yet free for the new? Partisanship is too easy to be quite noble.

Such a text as ours to-day is surely a good text for a college.

For in a college as nowhere else the old and the new meet—the spirit of conservatism and the spirit of progress and change. Shall they not meet as allies, never as aliens? The text is the word for the hour in an epoch of college transition. The whole atmosphere of such an epoch should be pervaded by that rational Christian courage which discerns the divine con-

tinuity of history—which finds the glorious fulfilment of the old in the changing scenery of the new.

A college is an institution where live men are trained by a past rightly interpreted for a future nobly conceived. It is a superb alembic where knightly loyalty to the old is transformed without intellectual or moral loss, into enthusiasm for progress and practical adequacy for the future. Christian scholarship then can take, must take no narrower motto for its philosophy—no poorer maxim for its faith, than the old shining sentence of Saint Paul, “If that which is done away was glorious, much more that which remaineth is glorious.”

I know but one way in which a man can combine these two ideals. It is to bathe the soul at the same time in the spirit of science and the spirit of Jesus. For the two are not alien to each other, nor does their mention in the same connection savour of irreverence. Jesus stands at the summit of Nature where Nature touches the heavens. A reverent Science is in harmony with the genius of the Incarnation.

My friends and brothers, who shall better stand for the union of these too often divided things and for that rational and Christian courage which is the product of both in their combination, than the men of New England? What institution shall better incarnate this broad and royal blending of tones than the New England college? Shall our great New England tradition of faith *and* freedom be brought down to pettiness and contempt by a surrender in either direction to that pert partisan challenge which calls us either to sacrifice faith to critical dexterity or sacrifice freedom to traditional orthodoxy? I hear the spirit of the scholarship of New England answer “No.”

Thank God that the great names of the past in Amherst College eloquently forbid such partisan surrender, and insist that the fields of science and the heavens of faith constitute together one cosmos of God. Never can this too frequent but ignoble divorce be accomplished between reason and faith, while the noble name and temper of a great former President of this college who explored the rocks of the mountains, while he yet “loved Jerusalem,” survive in the Christian fidelity, the intellectual liberality, the manly student-comradeship of the professor of to-day.

MEMBERS OF THE GRADUATING CLASS :—

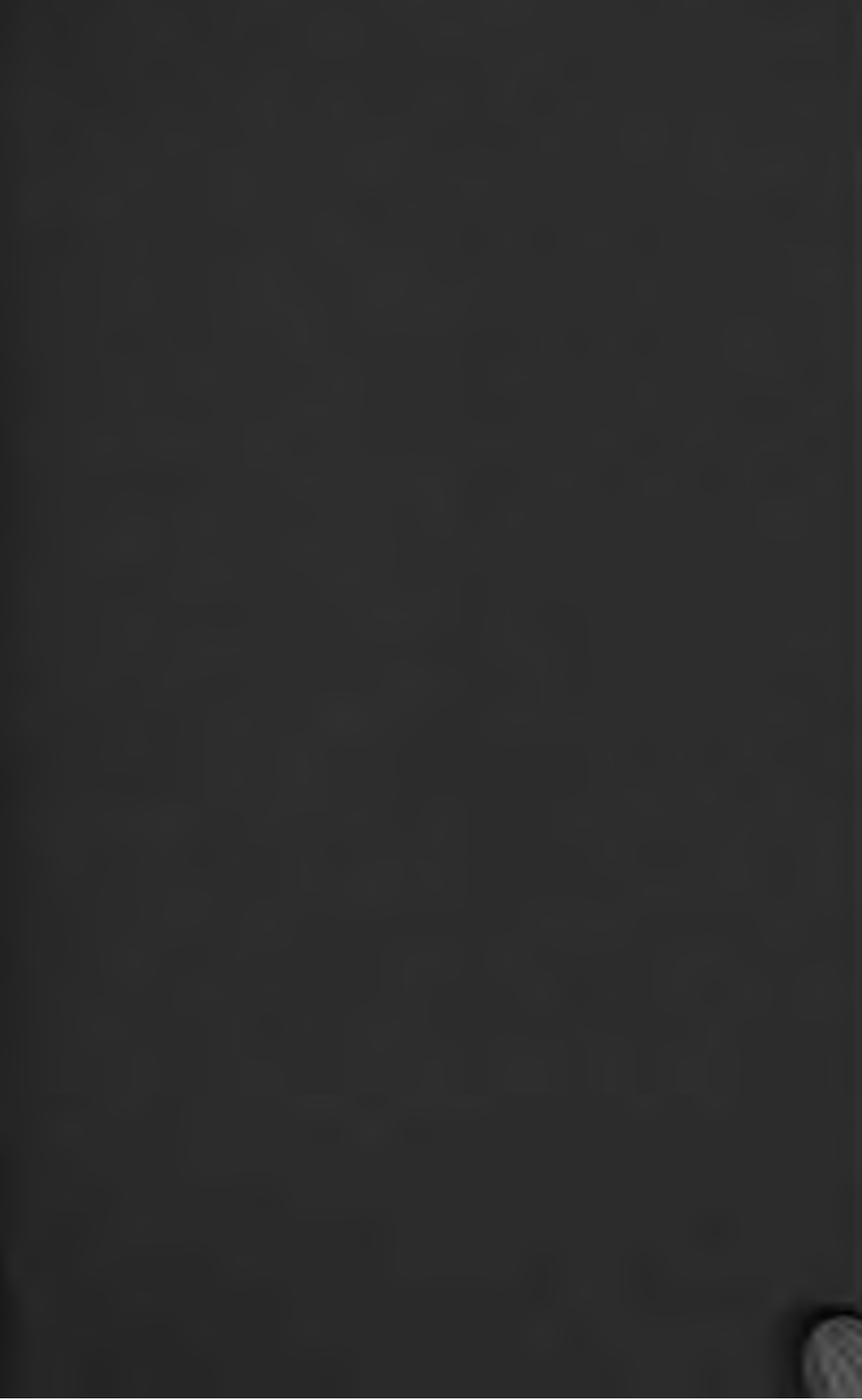
Perfunctory words have no place here, nor should a stranger usurp the prerogative that belongs to your instructors, of accompanying

these hours of your graduation with that which arrogates to itself any formality as of personal charge. I would rather, in the simpler fashion, as man to man, express a faith,—a faith in you and a faith for you. For surely in such men as you enthusiasm is achievement, purpose is performance, and vision victory.

The epoch of graduation may well be called a commencement. It is like the lock on the Grand Canal, where the terminal of one stadium becomes the beginning of the next, as one is lifted to the higher level. Because you have been true you will be true. Because you have climbed so far, therefore you will climb yet higher, for this epoch of graduation is only a terrace on the mountainside.

We live in a time when God is commissioning and crowning men for the offices and errands of an intelligent philanthropy, of a just patriotism, of a manly Christianity. Opportunities are ready. The times call for the men of the times. Into the threatening and tumultuous arena, filled with the shifting scenery of an agitated yet splendid age, I see the figure of educated Christian manhood enter, significant and ascendant, embodying as never before two supreme sentiments in unison, the spirit of mediation and the spirit of progress. What a time for men to walk with Christ in the service of their country, in the service of humanity! So will you walk. And may God give you strength, give you steadiness, give you grace!







EXERCISES

AT THE

Placing of the Corner Stone

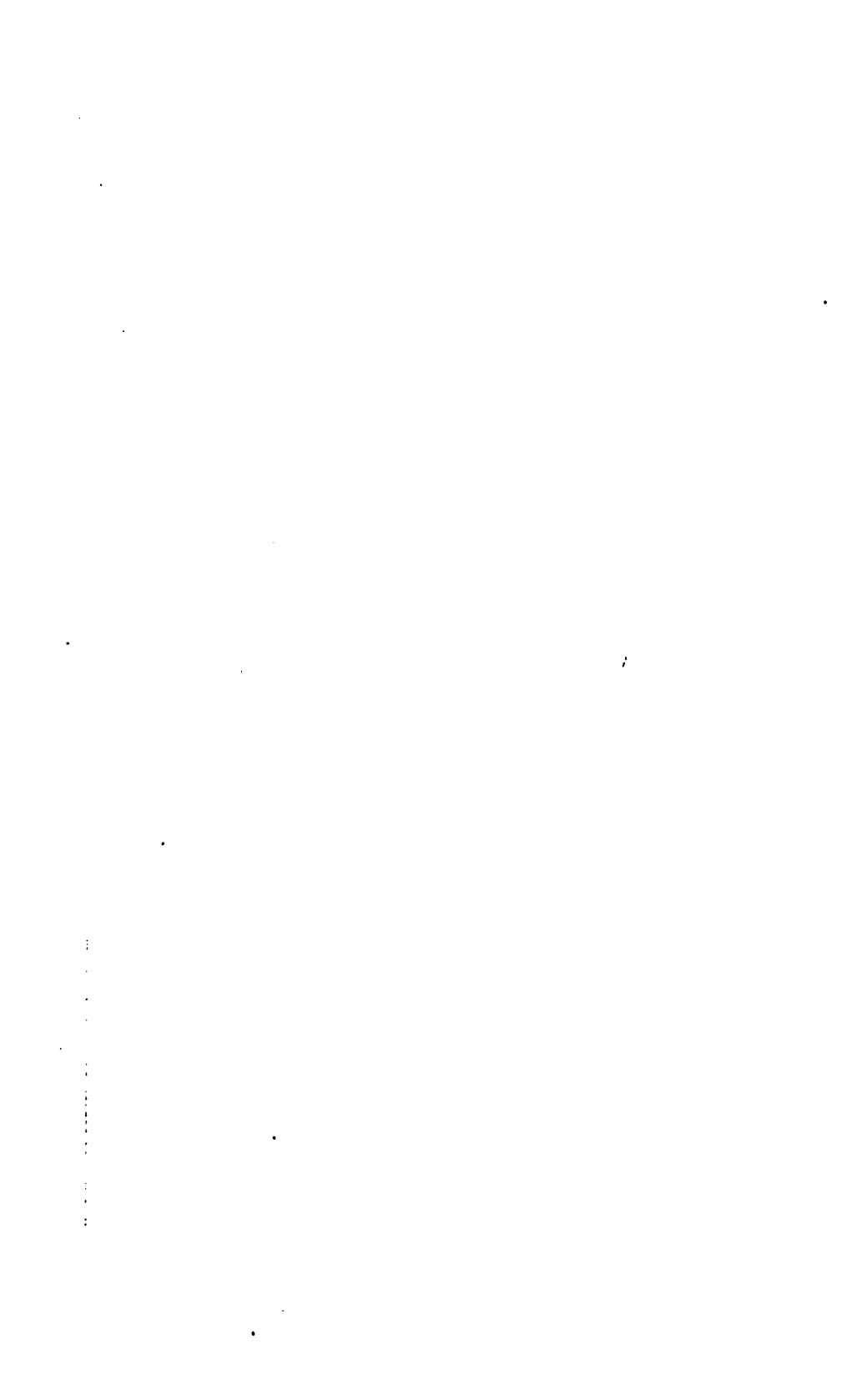
OF THE

COLLEGE CHURCH,

AMHERST COLLEGE, SEPT. 22, 1870.



AMHERST :
STORRS & McCLOUD, BOOK AND JOB PRINTERS.
1870.



EXERCISES

AT THE

Placing of the Corner Stone

OF THE

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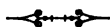
AMHERST COLLEGE, SEPT. 22, 1870.



AMHERST :

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1870.

Order of Exercises.



The officers, students and friends of the College, ladies and gentlemen, having assembled about 2½ o'clock in the afternoon of Sept. 22d, 1870, upon and around the site on which the foundations of the edifice had been laid, attention was given to the services of consecration in the following order :

- I—Preliminary Statement.....By the President.
- II—Introductory Prayer.....By Prof. Tyler.
- III—Address.....By Rev. C. Cushing of Boston.
- IV—Placing Stone.....By the Senior Class.

V—Hymn.

Christ is our corner-stone,
On him alone we build ;
With his true saints alone
The courts of heaven are filled.
On his great love
Of present grace,
And joys above
Our hopes we place.

Thine, O Lord, are power and greatness;
Glory, victory are thine own ;
All is thine in earth and heaven,
Over all thy boundless throne.

Riches come of thee and honor;
Power and might to thee belong;
Thine it is to make us prosper,
Only thine to make us strong.

Lord our God, for these, thy bounties,
Hymns of gratitude we raise;
To thy name forever glorious,
Ever we address thy praise.

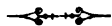
VI—Prayer by Rev. Mr. Jenkins.

DOXOLOGY.

Praise God from whom all blessings flow,
Praise him all creatures here below,
Praise him above ye heavenly host,
Praise Father, Son and Holy Ghost.

BENEDICTION.

THE PRESIDENT'S Preliminary Statement.



We have assembled to place the corner stone of an edifice which, in accordance with the great idea of the College, "the highest education and all for Christ," is to be when completed and dedicated, the COLLEGE CHURCH.

In pursuing this principle which has always actuated some of us, a desire has long existed, since we have public worship together, to hold the religious services of the Sabbath, as other churches do, in a retired, consecrated, Sabbath-Home, from which all the studies and distractions of the week should be excluded, and where the suggestions of the place should assist us to gather in our thoughts and, in the enjoyment of sacred silence, to confer with God. This desire was perhaps intensified by the condition of our old Chapel before it was renovated, and of the Village Church before it became College Hall, and before the new and beautiful edifice which now adorns the town, was erected in its stead.

Under the inspiration of such sentiments, a sum of money was consecrated and bestowed which has become of such value through investment that the Trustees felt justified in proceeding to lay the foundations on which we stand.

Some of the views of the donor in furnishing the means for the College Church were thus expressed to the Trustees at the time they were given and in the same spirit were gratefully accepted by them. "1st. The Church is to be used by the College for strictly religious observances, especially for christian worship and preaching, and for no other purpose. "2nd. The preacher shall always profess his full and earnest belief in the religion of the old and new Testaments as a supernatural revelation from God, and in Jesus Christ as the

divine and only Saviour, "who was crucified for our sins and rose again for our justification," and generally, and for substance of doctrine in the evangelical system or gospel of Christ, as understood by the projectors and founders of the College. "3rd. The preacher in the pulpit and in all the exercises of this church, shall exhibit that sobriety, dignity and reverence of manner and expression which becomes the sacredness of the place, and is in keeping with those deep and solemn emotions which true christians are supposed to experience."

Some have wondered, if we had money for such an edifice why we did not proceed at once to erect it. That course would have been *American* which is apt to be extemporaneous in all things. Other organizations as they look up to a great past, look down also to a great future. "We are of yesterday," and I will not add with Job, "know nothing," but our intense and hurried spirit has a tendency to confine our views too much within the limits of the present. Individuals die—but an Institution like this has before it, we trust, the life of centuries. Why not, like the old prophets, live somewhat in visions of the future, and as Abraham, two thousand years beforehand, rejoiced to see Christ's day, and saw it, and was glad, why not bear deprivation with repose of spirit and rejoice in blessings to be obtained by those who come after us? And so much the more, if, when the processes of Providence are slow, we can yet see them advancing and help forward their fulfilment? Influenced by these ideas, we thought it better to build well than to build quickly, nor have we even yet funds sufficient, though they have been somewhat accumulating, for the full completion of the work and its appointments. But as we would not mar the design, by commencing too early, we could not afford to lose the influence intended by delaying too long. We have, therefore, followed the example of the old churches, which in this respect is good, and proceed, trusting in God and the friends of education that if any further funds should be required in finishing up the undertaking, christian hearts and christian purses will supply them.

The building is designed in the pointed style of architecture, and is cruciform in plan, having a nave and transept, and a tower and spire at the angle formed by the nave and north transept. The materials employed in carrying out the design of the exterior are granite and brown stone, the latter being used for all trimmings and ornamental work. Some of the gables of the building are ornamented with large rose windows, filled with moulded stone tracery, while underneath is an arcade of five windows, between which are

polished red Scotch granite shafts, with caps and bases moulded and carved with naturalistic foliage. The other gable is filled with an arcade of windows rising in the centre, and increasing in width as they ascend. The principal entrances to the church are through the tower. They are ornamented with polished red granite shafts, with carved and moulded caps and bases. The tower is twenty-four feet square at its base, and is composed of four stages, changing from a square to an octagon, and ornamented with an octagonal spire, the whole rising nearly one hundred and fifty feet. The entire framing of the roof in the interior is intended to be shown, and will be painted and decorated in accordance with the general character of the interior finish of the building. The furniture will be of butternut, with the exception of the pulpit and organ frame, which will be of black walnut. The pulpit will stand at the west end of the nave, and will have the organ behind it. The seating capacity of the building is intended for the accommodation, when filled, of five hundred and fifty persons. The architect is William Appleton Potter, Esq., of New York. *Person only* Mr. Richard ~~Parsons~~ has contracted for the mason work, and Messrs. Marshall & Riker for the carpenter work.

The question of location was one which for a long time gave us serious embarrassment. The nature of our grounds and the situation of existing buildings had rendered the selection of appropriate sites for new structures perplexing, and were the necessary occasion of differing opinions. It might seem to our old graduates and to others who have not studied the case, an unexpected and singular movement, to pass over, as we have done, into what was regarded heretofore as the back yard of our college grounds, and crowd the new edifice into the very mouth of the dormitory which has for some years crowned the knoll. But looking away from East College, destined sometime or other to be removed, let me say to each one who doubts the propriety of the location, *circumspice*. Think of a pleasant Sabbath morning, as our young men and families of many generations of the future throng to the house of prayer, and see the beauty of the Lord spread over the mountains and the intervales before us, and the quiet homes nestling within it, and tell me will not nature furnish inspirations to praise? If we need further reason, it may be expressed in the brief words of Mr. Williston, who has often surprised me with the breadth and wisdom of his views on such subjects. When the advice of the best architectural and gardening skill in the country had been obtained, and reasons set forth, and the final question was put to that gentleman, shall

we place the building for present convenience or for a hundred years to come, his immediate response was, "500 years to come."

I had long desired that the atmosphere of the College and the country round us might be sweetened by a chime of bells in the College church tower, when it should be completed ; but none of us had known how to answer the oft-repeated question, how shall we honor the precious memories of our soldier-students who perished in the war? By the munificence of our friend, George Howe, Esq., of Boston, both these objects have been charmingly secured. We shall have 10,000 lbs. of bell-metal, with as many bells as the tower will contain, the largest of which is expected to measure 44 inches in diameter, and the others to be gradually smaller in proportion. By this one arrangement, our College church tower will not only throw out upon the breezes the sweet invitations of Christian psalmody to worship, on the Lord's day, but will commemorate in patriotic and soothing melodies, on appropriate occasions, the nobleness of our sons and brothers who honored the College while they shed their blood for Christ and dear native land.

To carry out the beautiful idea of a Sabbath and a memorial chime year after year, and from generation to generation, I am aware that something more will be necessary than a mere voluntary occasional interest in it. May not some person be found who will give us a scholarship, the income of which shall amount to not less than two or three hundred dollars, and the benefit of it be bestowed, from time to time on some meritorious student of musical capacity who shall qualify himself for the service, and take the charge of it? We shall also need AN ORGAN, and as good a one for the size, as the best skill in that line of construction can furnish. And I am sure, I shall speak the minds of all the students and friends of the College, when I add that if the sobrieties of the occasion forbid applause, there are in your hearts, for the COMING MEN who may give us a memorial scholarship and a church organ—not only three cheers, but a hundred times three, and that all these will be echoed back in gratitude by the students of many centuries to come.

We have spoken of this new edifice as the College church. We call it church instead of chapel, because we would distinguish it from the old chapel opposite to us, and are not willing to do this by the use of any mere human name, and because while the word chapel, from the Latin *capella*, has no Christian significance, in its etymology, but means only a short cloak, hood or cowl, and was first used, it is said, to designate the tent in which St. Martin's hat

or cowl was preserved, the word church finds its origin and its meaning in the Christian epithet, *κυριακός* "belonging to the Lord," and which, while it is a proper designation alike for an assembly of believers and for the consecrated place in which they worship, is just as appropriate for a small building as for a large one.

And now, as we lay down this corner-stone, let it be with no formal solemnities, but with earnest prayer that He who is alone our corner-stone, may bless and accept the work, and never become, through man's impenitence, a stone of stumbling and rock of offense to any Amherst student in all generations.



REV. MR. CUSHING'S ADDRESS.

The American College is unique in its character and is well understood. It is not merely an educational institution, but it has a distinctively religious character. It was founded originally for Christ and the Church.

The history of our Colleges is highly creditable to New England, illustrating the character of the people, giving proof of their intellectual culture and Christian principle. The Colleges themselves have been a success. Their primary design was to furnish men for the Gospel ministry; and in the accomplishment of that mission they have moulded the moral and religious character of the nation. Themselves the product of Christian culture, they have reserved to perpetuate and extend that culture. But a careful survey of our national condition at the present time discloses influences at work to supersede or essentially modify our College system.

We have our public schools, which are Christian only in the most generic sense; and some persons would take from them this crowning excellence and make them Pagan. We have high schools and State universities. This series of institutions constitutes a new system of education, in which the moulding influence of evangelical religion is left out. By this new system our young men receive intellectual training and are prepared for business life, but they are not led to devote themselves to the Gospel ministry. Hence, if we would have our churches supplied with pastors,—if we would have missionaries sent forth to evangelize the world, we need the *College*,

still, as the essential means of their training. We need the Christian academy, also, as the legitimate feeder of the College. These two systems of education, represented by the Christian College, and the State university, are not necessarily in conflict, but they may be brought into competition, and especially in the more recently settled portions of our country, State patronage gives to the latter such advantages as to peril the existence of the former. Not only is there this source of danger to the American College as a religious institution, but at the present time the old College system is assailed, and an attempt is made to secularize our oldest and most revered institutions.

At Harvard, it has been proposed so far to conform the College to a German university as to dispense entirely with the Sabbath Chapel service. At Yale, the proposition has been made to degrade the College, making it simply a branch of the university, reducing it to the rank of the Scientific department or the school of Practical Mining. Public demonstration is made of an unwillingness to have a College controlled by ministers of the Gospel. This secularizing spirit is manifested everywhere,—the atmosphere is affected by it. We live in a materialistic age, and have occasion to offer the prayer of Lord Bacon, "That human things may not prejudice such as are divine, neither from the unlocking of the gates of sense, and the kindling of a greater natural light, anything of incredulity or intellectual *night* may arise in our minds towards divine mysteries." That we may see the practical influence of this materialistic spirit upon the supply of ministers for our churches, we will take a period of fifty years, and see what that supply has been. In order to allow time for the Alumni to enter the ministry, we will not include in this period the last five years. We will take the eight Colleges in New England which were founded by Congregationalists,—Amherst, Bowdoin, Dartmouth, Harvard, Middlebury, the University of Vermont, Williams and Yale. From 1815 to 1865, these Colleges furnished 16,240 graduates and 4,109 ministers, about 25 per cent. ministers. Dividing the fifty years into decades, the proportion of the graduates who became ministers was as follows :

First decade.....	30 per cent.
Second "	35 per cent.
Third "	27 per cent.
Fourth "	20 per cent.
Fifth "	18 per cent.

A great decline during the last half of the period !

The different Colleges have furnished ministers, relative to their alumni, as follows :

Amherst,.....	46 per cent.
Middlebury,.....	42 per cent.
Williams,.....	33 per cent.
Yale,.....	24 per cent.
Dartmouth,.....	24 per cent.
University of Vermont,.....	24 per cent.
Bowdoin,.....	21 per cent.
Harvard.....	11 per cent.

Amherst stands at the head, and in the number of ministers which it has furnished, during this period, is second only to Yale.

Yet Amherst declines, in this regard. The ministers which she furnished in these decades relative to the entire number of her alumni is as follows :

First decade,	58 per cent.
Second “	57 “
Third “	51 “
Fourth “	42 “
Fifth “	35 “

Some may suppose that these facts show that a liberal education is more common than formerly, an accomplishment of those who do not enter upon professional life. This is true. But the facts also show that there is a sad decline in the number of young men who are entering the ministry.

The number from these Colleges who became ministers in these successive decades was :

First decade	688
Second “	988
Third “	946
Fourth “	730
Fifth “	757

While the number of graduates of the last decade is nearly double that of the first, the number of ministers in the last is but a slight increase over that of the first, although the demand for ministers is greatly augmented.

The Congregationalists have to-day five hundred more churches than they have available ministers. These facts demand our serious and prayerful consideration. They show the importance of

maintaining the old American *College system*, and the importance of the *College Church* as a means of grace to the students, and as the means of furnishing ministers of the Gospel.

We live in an eventful period. Two days ago the Papal States existed as a power. To-day they are not, for Emanuel has taken them. May this church, the cornerstone of which we lay to-day, stand until *our* Emanuel shall take from the Pope his spiritual dominion and reign over all churches and all lands.

God grant His abiding presence in this house. Here may He marshal His own forces, and hence lead them forth to battle and to victory.



Placing the Stone.

The stone having been placed in position by a committee of the Senior class, Mr. E. S. Fitz, their chairman, struck the stone three times with the trowel, and said: "In the interest of religion and for the highest good of humanity, we have laid this corner-stone." Then turning to the President, he continued, "In behalf of the Senior class, to whom was committed the placing of this stone, I now declare to you, sir, as President of the College and Pastor of the Church,—that the corner-stone is well and duly laid, and we remain your obedient servants in the cause of Christ."

The President responded: "Let the corner-stone thus placed be regarded as an emblem of the Stone of Stones on which the Church is erected, and with earnest prayer that the Lord Jesus will accept and prosper the work we are undertaking, we would lift up our hearts in praise and say, 'Glory be to the Father and to the Son and to the Holy Ghost, as it was in the beginning, is now, and ever shall be, world without end. Amen.'"







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PREPARATION FOR CITIZENSHIP

AT AMHERST COLLEGE.

BY ANSON D. MORSE, A. M.

Winkley Professor of History and Political Economy, Amherst College.

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II.

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GOOD citizenship is a product of character even more than of knowledge. One may know the facts and science of politics as thoroughly as Aaron Burr knew them and still be a bad citizen. If at graduation a man lack the spirit of the good citizen, he will, in all probability, never possess it; if, on the other hand, he has this spirit, but lacks political knowledge, his deficiency admits of partial remedy; he can acquire afterwards a working knowledge of politics.

The spirit of a college is an important factor in the education of its students; it shapes their ideals, and thus counts for much in deciding the type and quality of their citizenship. The political traits of the Amherst spirit are like those of the decade, 1815 to 1825, in which the college was founded.¹ National as opposed to sectional feeling, sympathy with the people rather than a particular class, devotion to those interests which are universal, have always been marked characteristics of Amherst. The relation of the College to slavery, the civil war, and reconstruction, as shown in its teaching and the conduct of influential representatives, proves the strength and breadth of its nationalism. The democratic ideal of relationship between man and man is perhaps nowhere more perfectly realized than among the undergraduates at Amherst. Personal merit is the basis of distinction. Only talent, and fine or strong traits of character confer influence. There is no mammon worship. The student who works his way enjoys the esteem of the college community as fully as the student who spends lavishly. Straited means lead neither to a surrender of self respect, nor to a struggle with society, the result of which, too

¹Amherst reckons 1821 as her birth year, but Amherst Academy, "the mother of Amherst College," was dedicated in 1815 and the College charter after a protracted and really desperate struggle was obtained in 1825. Vid. Tyler's *History of Amherst College*, Chapters III.-X.

often, is embittered isolation. The influence upon the rich is not less wholesome. They learn to judge themselves and others, not by what a man has, but by what he is and does. They learn also to regard themselves as belonging to the people rather than to a privileged class. Another side of this trait is the marked preference for substance over form which characterizes both student and graduate. That the Amherst spirit is sensitive and responsive to universal interests is proved by the history of the college in respect to science, philosophy and foreign missions.

The first formal step in "preparation for citizenship" at Amherst is taken at an interview with the President at the beginning of Freshman year. In this an exposition is given of the paragraph in the college catalogue which treats of "Administration." The most important clause reads: "A student whose recommendations have been approved, and whose examinations have shown him capable of admission to Amherst College, is received as a gentleman, and, as such, is trusted to conduct himself in truthfulness and uprightness, in kindness and respect, in diligence and sobriety, in obedience to law and maintenance of order, and regard for Christian institutions as becomes a member of a Christian College." The words are explicit; still, it is found useful to impress them upon the memory and to make clear as possible their application to the actual conditions of college life. Emphasis is laid upon the facts; first, that the relation with the college into which the student enters is on his part voluntary; second, that this relation is of the nature of a contract, which binds the college to admit the student to its privileges, and the student to observe the conditions on which these privileges are granted: and consequently, that non-fulfillment of obligations by either party should terminate the relation; third, that this relation is direct; the student deals with the college and the college with the student, not as a member of a class, but as an individual. The next step is participation in the government of the college. The nature and extent of this participation are stated in the catalogue as follows: "The Faculty have judged it wise to associate with them, in the immediate government of the College, a body chosen by the students themselves, to which questions of College order and decorum are referred, and whose decisions, if approved by the President, are binding in the College. This body is called the College Senate, and consists of four Seniors, three Juniors, two Sophomores, and one Freshman, chosen

by their respective classes. At the meetings of the Senate, which are held regularly once a month, the President of the College presides."¹

The attitude of the Senate towards the College is indicated by the following extract from its Constitution:—

"Before taking his seat, each member shall sign the Constitution, to which shall be prefaced the following pledge: 'I hereby sign this Constitution, promising to act as a judge upon all matters brought before me, and to endeavor in all my decisions to seek always the good order and decorum of the College.'"²

The powers of the Senate are as follows:—

"Whenever a member of the college shall appear to have broken the contract upon which he was received as a member of Amherst College, except in cases pertaining to attendance upon college exercises, determined by the regular rules of the Faculty, the case shall be brought before the Senate, who shall determine both as to whether the contract has been broken, and whether, if broken, it shall again be renewed.

"The jurisdiction of the Senate shall also extend over such procedures of any body of students, relating to order and decorum, as affect the whole college, and over whatever other business the President or Faculty may submit to it; it being understood that in such cases the action of the Senate shall have the full authority of the college.

"Any member shall have the right to introduce business, also to call for any vote by ballot whenever he shall desire it."³

The Faculty, subject to the approval of the Trustees, remains the general law-making branch of the college government. In the main the functions of the Senate are judicial. A large proportion of cases which come before it permit the application of principles and rules already in force. A question frequently adjudicated is whether a particular act in violation of order, decorum or good morals, should terminate the relation of the perpetrator to the college. But the Senate does more than merely interpret law: it deals with many questions which relate to the welfare of the college in a general way, and to the settlement of which, existing rules are inapplicable. Questions which concern student publica-

¹ College Catalogue, Par. on Organization.

² Constitution of the Senate, Art. II., Sec. 4.

³ Ibid. Art. IV.

tions, intercollegiate contests, the privileges of and restrictions upon organizations which engage in these, the Senate decides according to its own best judgment; and in so doing, is gradually building up a system of college local common law. A third very important function of the Senate is to serve as a kind of permanent conference committee in which the President represents the Faculty and the Senators, the students. By means of these conferences each of the represented bodies becomes acquainted with the views and feelings of the other, and under circumstances which dispose each to considerateness. The result is the prevention of those frequent and, at times, grave collisions which arise from misunderstandings between faculty and students. The President can veto the decisions of the Senate as he can those of the Faculty; but he has very rarely found it necessary to do so. After full discussion, the President, who from the nature of his office embodies the conservatism of the college, and the Senators, who in their official capacity represent its radicalism, have come to an agreement respecting almost every question. The idea of a contract as the basis of the relation between student and college, and participation of the student in college government, are leading features of what some have called the "Amherst System." The influence of this system begins with the first day of college life and increases to the end of the course. Its first aim is to develop in the student the capacity for wise self direction; its second, is to awaken in him an interest in the college and a sense of responsibility for its welfare. The system combats at the threshold the tendency once prevalent and still powerful, to put class feeling and college custom in the place of the judgment and conscience of the individual student. It tries to make him feel, with respect to the administration of college government, that he is not so much the subject of the faculty as their colleague.

Is the system successful? Yes, but like other systems it must be used a while before it can work with perfect smoothness. Under this system college public opinion has greater weight than it used to have. It is probable that neither faculty nor students realize as yet the full consequences of this fact. In order that public opinion may become a safe guide in determining college policy, two conditions are requisite; first, it must be based on regard for not one, nor a few, but all important interests concerned; second, the estimate of the relative importance of these

interests must be just. From a standpoint which takes into view only a certain set of interests, required attendance at church and chapel seems indefensible; from a standpoint with a broader outlook, the question assumes an aspect which would lead advocates of the voluntary system who have the highest good of the college at heart to wish for more light before assuming the responsibility of a revolutionary change. The habit of looking at both sides, or rather all sides of a question, cannot be formed in a day. The encouraging feature of the situation at Amherst is the evidence of progress in this direction. In general the difference between faculty-views and student-views is less radical than it used to be; the relation between faculty and students is more frequently that of friendly and hearty coöperation. Under the influence of this change certain hateful incidents of the old method of governing—its conflicts, diplomacy, and espionage, are being forgotten. The student is becoming a good citizen of the college community, and in this way, is preparing to become a good citizen of the state.

At Amherst the fraternities, nine in number, are a marked feature of the college. The proportion of "Society men" is considerably larger than twenty years ago and is steadily increasing. In certain respects the fraternities are colleges within the college; they are bodies of colleagues whose corporate aims are in sympathy with those of the college and supplementary to them. Their vitality and prosperity indicate that they satisfy a real want. In fact what they offer the student is something he needs and cannot with equal ease and fulness obtain by other means. To preparation for citizenship the fraternities contribute in several ways. They establish a close and permanent relationship between alumni and undergraduates, through which the juster views of life and of college opportunities and duties, which prevail among the alumni, reach and influence the undergraduates. By means of their intercollegiate relations the fraternities develop a friendly and magnanimous spirit towards other colleges. Through admitting delegates from each of the four classes they do much to keep class spirit from becoming arrogant and belligerent. As literary societies they encourage the serious study and discussion of political topics. But of all their services to preparation for citizenship one of the greatest is the aid they give in maintaining relations with general society. The tendency of college life towards seclusion is a survival in the field of education of the once dominan

influence of monasticism. This tendency explains in part why the educated modern is less frequently a man of affairs than was, in classic times, the educated Greek or Roman. To many a studious man, going to college has been to such an extent a going out of the world, that only with difficulty could he find his place again. To many who were not studious, partial isolation from ordinary social influences during the four years of College life has proved seriously demoralizing. The happiest result is when social and intellectual development keep even step. The comradeship which the fraternities have always fostered is now widening into practical citizenship. Through his chapter house the relation of the student to the town of Amherst is undergoing a radical change; he has become a householder, a neighbor, and a host; as a taxpayer he has an interest in the management of town affairs; his stake in the community is much more like that of other citizens than it used to be; in brief, through helping the student to maintain responsible relations with general society, the fraternities make it difficult for him to be a recluse, a Bohemian, or an Ishmaelite.

On the other hand it must be conceded that "Society men" are sometimes clannish; and clannishness is narrow and narrowing—the counterpart in college of sectionalism in the state. It is, however, a fair question whether the fault does not lie in the men rather than in the fraternities—whether in fact the fraternities do not in many cases really broaden the associations and sympathies of men who are by nature clannish. Observers agree that the evil was greater when the fraternities were fewer.

Turning now to the curriculum, we find that the studies and exercises which deal most directly with political subjects, are oratory, debates, history, political economy, international law, moral science, and discussions with the President. To oratory are assigned four exercises each week during the second and third terms of sophomore year, and one each week during the first term of junior year; to debates, one exercise each week during the last term of junior year and all of senior year. Of the relation of these studies to preparation for citizenship the professor in charge says: "As the oratorical aim is not to impress upon the student any arbitrary system of delivery, but to develop and train his individual powers, a necessary condition is a theme of interest and recognized importance to the speaker and his hearers. Experience has shown that this condition is most happily found in questions

relating to our political, social, and economic life. The more thoroughly the questions are studied and the more deeply interested the student becomes in their preparation, the more easily does he, as a speaker, relieve himself from restraints and reveal the powers and defects that demand the guidance and criticism of the instructor. This is therefore sufficient ground, aside from other important reasons, for making the course a stimulus and guide to reading and thought upon subjects readily seen to affect the welfare of our country. The subjects assigned are carefully arranged so as to make the course progressive and systematic. The work early interests the student in subjects bearing upon the duties of citizenship and in many instances it undoubtedly directs his private reading in the same channels. It is also probable that much of the forensic work in the literary meetings of the societies is largely influenced in its character by these exercises of the classroom.

"The questions assigned for debate and discussion relate mainly to political history, our social problems and present administration. Typical questions as debated or discussed by the class of '88 are: —

1. Has the influence of Compromise in our history been more harmful than beneficial?
2. Is the cure of our social evils to be more largely moral and religious than physical and economic?
3. Should the friends of temperance favor high license?
4. Was Thomas Jefferson a better president than Andrew Jackson?
5. Is the "Fisheries Bill" the best means of meeting our difficulties with Canada?
6. What is the true regulative principle in the industrial world?
7. How are the interests of the laboring classes in this country to be best advanced?
8. What should be done in regard to the accumulating surplus in the United States Treasury?
9. Which of the great political parties in the history of the United States has had the most influence upon its institutions?
10. What should be the course of the United States in regard to immigration?"¹

¹ Quoted from statement of Professor Frink, made at request of the writer.

In history there are two courses: one, a general course, which has four exercises each week of junior year; the other, a course in the political and constitutional history of the United States, which has two hours each week of the first senior term and four hours each week of the second. In the study of general history the following divisions are made: (1) A review of Oriental, Greek, and Roman history. (2) A course of twelve weeks on the period from the Migrations to the Renaissance, in which the history of England and the movements and institutions which affected western Europe as a whole, receive most attention. (3) A course of twelve weeks on the period from the Reformation to the French Revolution, in which the Reformation, the Catholic Counter-Reformation, and the Revolutions in England and France, are the features most studied. (4) A course of eleven weeks on American colonial history, the political history of the United States, and, in outline, the history of Europe since the French Revolution.

Throughout these courses the standpoint is that of world history. Only those facts are studied which have a traceable relation to general progress. The history of a nation is treated as a chapter in universal history; the importance of individuals, peoples, movements, and institutions is measured by their contributions to civilization. The question which the course propounds is: through what experiences and by what agencies has the world as it was at the dawn of history become the very different world of to-day?

This course is a preparation for citizenship, because every man is a citizen of the world as well as of a particular country; and the best work of a citizen is that through which he aids his country to recognize and discharge its obligation towards the world. Moreover, there is nothing which so clears the judgment respecting national affairs as acquaintance with and interest in the affairs of mankind.

The course in political and constitutional history begins with the inauguration of the new government in 1789, and comes down to the close of Reconstruction. In the spring of 1888, a special course of twenty lectures on "The Civil War and Reconstruction," was given. In explaining methods, an account of the work of the first term will serve. The period covered is 1789-1833. The following general subjects are selected for investigation by the students: foreign relations; Indian policy; banks; internal improvements; tariffs; national sovereignty; state sovereignty.

These subjects are sub-divided; that on foreign relations, for example, furnishes topics for ten students; that on tariffs, for three. Examples of special topics are: (1) foreign relations during the administration of Washington; (2) the foreign policy of Washington compared with that of Jefferson; (3) foreign policy of the Federalists during the administrations of Jefferson and Madison; (4) history of the first bank of the United States; (5) history of tariffs down to 1816, including an analysis of Hamilton's Report on Manufactures in 1791; (6) history of New England Sectionalism; (7) the political work and influence of Hamilton; (8) the political work and influence of Gallatin. Each student, as far as possible, makes use of original sources; in studying Hamilton, for example, he reads Hamilton's own words. The essays, so far as the nature of the topic permits, conform to the following scheme: (1) narrative of facts, (2) discussion of the constitutional questions involved, (3) influence upon political development. Each essay is read before a section of the class and in the discussion which follows every member takes part. About one-fourth of the lectures of the course are introductory to the period; the others treat of party history.

Political economy has four hours each week of senior year, and international law four hours during the last term of that year. "The first term is devoted to the study of economic theory; the second, to the social problem and the problem of transportation. In the study of the social problem, the individualistic, socialistic, and social reformatory propositions are analyzed and criticised and the lines indicated along which the solution must take place. In this course one important aim is to determine the principles and limits of state action. The third term is devoted to fiscal science and the tariff. In the former the main topics of investigation are: the theory of public fiscal administration; the principles which should guide in making appropriations for public expenditure; the subject of revenue in its general aspects; the methods of raising revenue; the principles and the different forms and systems of taxation; the general subject of public credit; the extent to which the state may safely employ credit; and lastly, the principles which should guide in the administration, contraction, liquidation, and conversion of the public debt. In the course on the tariff, the theories of free trade and protection and the history of the tariffs of the United States, are studied. The aim is not to make stu-

dents free traders or protectionists, but to secure acquaintance with the subject and establish the habit of candid thinking.

"The method of instruction is as follows: the subject is first outlined by means of lectures and then discussed in the class. By means of references, acquaintance with authorities is obtained. For those who can devote more time to the subject a seminary is held for the free discussion of practical economic questions. In international law the methods are the same as those employed in political economy."¹

Moral science has five hours each week during the second term of senior year. "In the study of Ethics, which covers the whole sphere of moral obligation, special attention is given to the study of citizenship. It is felt that however perfect may be the form of government, its administration and its laws, these alone can no more make a good citizen than sunshine and rain and a rich soil can transform a pebble into an oak; there must be a spirit of life from within before environment can call out growth; the spirit of life, the vital force of citizenship, is virtue.

"The method of conducting the study is, first, to ground the student in the convictions of an immutable morality as opposed to prudence and expediency. Then, having found the source of moral obligation, an exhaustive investigation of the nature of the State and claims of positive authority is attempted, in order that the conscience of the student may be aroused and government may be seen to be one of right as well as might. Having thus laid the foundations of civil authority, the questions respecting the forms which are legitimate and the limitations of its action, are discussed, so far as these can be brought within a philosophical investigation."²

Once each week during two terms the Seniors meet the President for the discussion of questions which they themselves propose. A large percentage of these questions relate to social and political problems. The discussions are more like conferences than formal classroom exercises. Their value as a preparation for citizenship will be understood by all who know the college.

Summarizing, we find that the political studies at Amherst equal thirteen and a half full terms of four exercises each week. Of these three terms and a quarter are in the department of public

¹ Quoted from statement of Dr. Tuttle.

² Statement of Professor Garman.

speaking, eight and a half in the department of history and political economy, one and three quarters in the department of philosophy. Most of these studies belong to junior and senior years; were they equally distributed, there would be one and a fraction for each term of the course.

To what extent do the students come under the influence of these studies? Debates, moral science and discussions with the President are required; the others are elective. The present divisions in oratory include all the class except eight members. All of '88, except three, and of '89, except two, elected at least one section of the general course in history; and of these, nearly all elected the three terms. On the other hand, the division in political and constitutional history is smaller than in any other of the studies named; in the class of '89 which has ninety-eight members, it numbers forty-one. About half the last class elected political economy and international law; in the present class, the proportion is somewhat greater.

But long before the extended introduction of political studies, a college course was justly considered a valuable preparation for citizenship. To explain this, account must be taken of factors, such as the influence of teachers, of classical study, and of religious instruction, whose bearing on political education is too often overlooked. Their importance in this respect is very great. A strong teacher who is himself a good citizen, invariably develops good citizenship in his pupils. Many of the selections from Plato,—the *Apology* and *Crito*, for example,—Thucydides, Demosthenes, Cicero, and Tacitus, concern the citizen even more than the scholar. Moreover, the study of the classics, through acquainting the student intimately with the thoughts and acts of great men and great peoples, tends to free him from the tyranny of petty interests, and creates in him a liking and aptitude for public affairs. The political service of religious instruction consists in part in the theory of the state which it teaches. The difference between the good and bad citizen begins with different conceptions of the state; to the latter it is an association for the furtherance of private ends; to the former, an organism in which the function of the individual is to work for the welfare of the whole. Not until a man has learned to feel as well as “think organically” can he be a good citizen; but religion and rational religious instruction promote, perhaps more than all other influences united, this kind of feeling and thinking.

